	r Ala 1	a Thi	r Gly	Ser 5		Glu	Lys	Glu	1 Cys		y Val	LThi	Ala	Thr 15	
As	p Ala	a Sei	Arg		Thr	Phe	Thr	Arg 25		Gly	ser,	Phe	Arg		. Thi
Th	r Ala	a Thr		Gln	Ala	Glu	Arg 40		ı Glu	Ile	Met	Lys 45	Gln	Met	: Glr
Asį	Ala 50		. Lys	Ala	Glu	Thr 55		Lys	Ile	val	. Val		Ser	Ser	Val
Ala 6		Gly	⁄ Xaa	Thr	Ala 70		Ser	Pro	Ser	Ser 75		Thr	Ser	Pro	Thr 80
Sei	Asp) Ala	Thr	Thr 85	Ser	Leu	Glu	Met	Asn 90		Pro	His	Ala	Ile 95	
			100					105					Ser 110		
		115					120					125			
	130					135					140		Lys		
145	i				150					155			Ala		160
				165					170				Thr	175	
			180					185					Val 190		
		195					200					205	Ser		
	210					215					220		Thr		
225					230					235			Arg		240
				245					250				Gln	255	
Pro	Pro	Thr	Ala 260	Ile	Ser	Gln	Pro	Ala 265	Ser	Pro	Phe	Gln	Gly 270	Asn	Ala

Phe Leu Thr Ser Gln Pro Val Pro Val Gly Val Val Pro Ala Leu Gln Pro Ala Phe Val Pro Ala Gln Ser Tyr Pro Val Ala Asn Gly Met Pro 295 Tyr Pro Ala Pro Asn Val Pro Val Val Gly Ile Thr Xaa Ser Gln Met 310 315 Val Ala Asn Val Phe Gly Thr Ala Gly His Pro Gln Ala Ala His Pro 325 330 His Gln Ser Pro Ser Leu Val Arg Gln Gln Thr Phe Pro His Tyr Glu Ala Ser Ser Ala Thr Thr Ser Pro Phe Phe Lys Pro Pro Ala Gln His 360 Leu Asn Gly Ser Ala Ala Phe Asn Gly Val Asp Asp Gly Arg Leu Ala Ser Ala Asp Arg His Thr Glu Val Pro Thr Gly Thr Cys Pro Val Asp 390 Pro Phe Glu Ala Gln Trp Ala Ala Leu Glu Asn Lys Ser Lys Gln Arg 405 410 Thr Asn Pro Ser Pro Thr Asn Pro Phe Ser Ser Asp Leu Gln Lys Thr 425 Phe Glu Ile Glu Leu 435 <210> 945 <211> 160 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (119) <223> Xaa equals any of the naturally occurring L-amino acids His Gly Ser Met Arg Arg Leu Leu Ile Pro Leu Ala Leu Trp Leu Gly

Ala Val Gly Val Gly Val Ala Glu Leu Thr Glu Ala Gln Arg Gly
20 25 30

Leu Gln Val Ala Leu Glu Glu Phe His Lys His Pro Pro Val Gln Trp 40 Ala Phe Gln Glu Thr Ser Val Glu Ser Ala Val Asp Thr Pro Phe Pro Ala Gly Ile Phe Val Arg Leu Glu Phe Lys Leu Gln Gln Thr Ser Cys 80 Arg Lys Arg Asp Trp Lys Lys Pro Glu Cys Lys Val Arg Pro Asn Gly Arg Lys Arg Lys Cys Leu Ala Cys Ile Lys Leu Gly Ser Glu Asp Lys 105 Val Leu Gly Arg Leu Val Xaa Cys Pro Ile Glu Thr Gln Val Leu Arg 115 120 Glu Thr Gln Cys Leu Arg Val Gln Arg Ala Gly Glu Asp Pro His Ser 135 Phe Tyr Phe Pro Gly Gln Phe Ala Phe Ser Lys Ala Leu Pro Arg Ser 145 150 155 160

<210> 946

<211> 221

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (198)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 946

Gly Gly Asp Pro Pro Gly Asp Leu Ser Ser Leu Ser Ser Lys Leu Leu
1 5 10 15

Pro Gly Phe Thr Thr Leu Gly Phe Lys Asp Glu Arg Arg Asn Lys Val 20 25 30

Thr Phe Leu Ser Ser Ala Thr Thr Ala Leu Ser Met Gln Asn Asn Ser 35 40 45

Val Phe Gly Asp Leu Lys Ser Asp Glu Met Glu Leu Leu Tyr Ser Ala

50 55 60 Tyr Gly Asp Glu Thr Gly Val Gln Cys Ala Leu Ser Leu Gln Glu Phe Val Lys Asp Ala Gly Ser Tyr Ser Lys Lys Val Val Asp Asp Leu Leu Asp Gln Ile Thr Gly Gly Asp His Ser Arg Thr Leu Phe Gln Leu Lys Gln Arg Arg Asn Val Pro Met Lys Pro Pro Asp Glu Ala Lys Val Gly 120 Asp Thr Leu Gly Asp Ser Ser Ser Ser Val Leu Glu Phe Met Ser Met 135 140 Lys Ser Tyr Pro Asp Val Ser Val Asp Ile Ser Met Leu Ser Ser Leu 150 155 Gly Lys Val Lys Lys Glu Leu Asp Pro Asp Asp Ser His Leu Asn Leu 165 170 Asp Glu Thr Thr Lys Leu Leu Gln Asp Leu His Glu Ala Gln Ala Asp Ala Ala Leu Gly Xaa Arg Pro Thr Ser Ala Pro Cys Pro Thr Pro 200 Pro Arg Gly Thr Ser Thr Thr Trp Glu Ala Leu Leu Ala 210 215 220 <210> 947 <211> 316 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (293) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (312)

<223> Xaa equals any of the naturally occurring L-amino acids

Glu Gln Tyr Val Cys Ala Gln Arg Asp Glu Tyr Leu Glu Ser Phe Cys

<400> 947

1				5	•				10	l				15	j
Lys	Met	Ala	Thr 20		Lys	Ile	Ser	Val 25		Thr	Ile	Phe	Gly 30		Val
Asn	Asn	Ser 35		Met	Lys	Ile	Asp 40		Phe	Gln	Leu	Asp 45		Glu	Lys
Pro	Met 50		Val	. Val	Asp	Asp 55	Glu	Asp	Leu	Val	Asp 60		Arg	Leu	Ile
Ser 65	Glu	Leu	Arg	Lys	Glu 70	Tyr	Gly	Met	Thr	Tyr 75	Asn	Asp	Phe	Phe	Met 80
				85	Asp				90					95	
			100		Val			105					110		
		115			Lys		120					125		_	
	130				Leu	135					140				
145					Ile 150					155					160
				165	Ala				170					175	
			180		Leu			185					190		Ī
		195			Phe		200					205			
	210				His	215					220				
225					Phe 230					235					240
				245	Pro				250					255	_
			260		Met			265					270		
ıπ	ser	Ĺeu	Gly	Met	Arg	Cys	Pro	Glu	Asp	Glu	Tyr	Ala	Gly	Tvr	Glv

275 280 285 Tyr His Ser Tyr Xaa Gln Gly Tyr Gln Asp Gly Tyr Gln Asp Asp Tyr 295 300 Arg His His Glu Ser Tyr His Xaa Gly Tyr Pro Tyr 310 <210> 948 <211> 162 <212> PRT <213> Homo sapiens <400> 948 Ser Thr His Ala Ser Ala His Ala Ser Gly Lys Gln Cys Gln Asp Ser 10 Lys Asp Ser Asn His Leu Pro Lys Met Ser Leu Ser Ala Phe Thr Leu 25 Phe Leu Ala Leu Ile Gly Gly Thr Ser Gly Gln Tyr Tyr Asp Tyr Asp 40 45 Phe Pro Leu Ser Ile Tyr Gly Gln Ser Ser Pro Asn Cys Ala Pro Glu Cys Asn Cys Pro Glu Ser Tyr Pro Ser Ala Met Tyr Cys Asp Glu Leu 70 Lys Leu Lys Ser Val Pro Met Val Pro Pro Gly Ile Lys Tyr Leu Tyr 85 Leu Arg Asn Asn Gln Ile Asp His Ile Asp Glu Lys Ala Phe Glu Asn 105 Val Thr Asp Leu Gln Trp Leu Ile Leu Asp His Asn Leu Leu Glu Asn 115 120 125

Ser Lys Ile Lys Gly Arg Val Phe Ser Lys Leu Lys Gln Leu Lys Lys

Leu His Ile Asn His Asn Asn Leu Thr Glu Ser Val Gly Pro Leu Pro

155

135

150

Lys Ser

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	1> s														
	2> (•													
<22	3> x	aa e	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
<40	0> 9	49													
Leu 1		Phe	Asn	Tyr 5		Tyr	Lys	Tyr	Ser 10		Glu	Gly	Asp	Ser 15	His
Leu	Gly	Gly	Gly 20		Arg	Glu	Gly	Ser 25		Lys	Glu	Thr	Ile 30	Thr	Leu
Lys	Trp	Cys	Thr	Pro	Arg	Thr	Asn	Asn	Ile	Glu	Leu	His	Tyr	Cys	Thr
		35					40					45			
Gly		Tyr	Arg	Ile	Ser		Val	Asp	Val	Asn	Ser	Arg	Pro	Ser	Ser
	50					55					60				
Cve	Lou	mh-	200	Dho	T		3.0-	a 1	•	a	••- 3		_		
65	ьец	THE	Asn	Pne	70	Leu	ASN	GIY	Arg		Val	Leu	Leu	Glu	
03					,,					75					80
Pro	Arg	Lvs	Ser	Glv	Ser	Lvs	Val	Ile	Ser	His	Met	T.en	Ser	Ser	Hio
		-4		85		-7-			90				DGL	95	1112
														,,	
Gly	Gly	Glu	Ile	Phe	Leu	His	Val	Leu	Ser	ser	Ser	Arg	Ser	Ile	Leu
			100					105					110		
Glu	Xaa		Pro	Ser	Ile	Ser		Gly	Cys	Gly	Gly	Arg	Val	Thr	Asp
		115					120					125			
m	N	71.	m b		D b -	a 1	01	-		_		_	_		_
TYL	130	TIE	Thr	Asp	Pne		GIU	Phe	Met	Arg		Asn	Arg	Leu	Thr
	130					135					140				
Pro	Phe	T.eu	Asp	Pro	Ara	Tur	T.ve	Tla	Acn	Clu	502	T 011	~1	170 1	D
145					150	171	Lys	116	vaħ	155	ser	neu	GIU	vaı	160
															100
Leu	Glu	Arg	Ala	Lys	Asp	Gln	Leu	Glu	Lys	His	Thr	Ara	Tvr	Trp	Pro
				165	_				170		_		- 4	175	
Met	Asp	His	Phe	Thr	Asn	His	His	Phe							

<210> 950 <211> 169

<212> PRT <213> Homo sapiens <220> <221> SITE <222> (161) <223> Xaa equals any of the naturally occurring L-amino acids <400> 950 Pro Arg Arg Pro His Arg Ser Cys Asp Met Pro Ala Ser Gly Glu Pro Leu Gly Cys Thr Pro Leu Leu Pro Asn Asp Ser Gly His Pro Ser Glu 25 Leu Gly Gly Thr Arg Arg Ala Gly Asn Gly Ala Leu Gly Gly Pro Lys 40 Ala His Arg Lys Leu Gln Thr His Pro Ser Leu Ala Ser Gln Gly Ser 55 Lys Lys Ser Lys Ser Ser Ser Lys Ser Thr Thr Ser Gln Ile Pro Leu 75 Gln Ala Gln Glu Asp Cys Cys Val His Cys Ile Leu Ser Cys Leu Phe 85 90 Cys Glu Phe Leu Thr Leu Cys Asn Ile Val Leu Asp Cys Ala Thr Cys 100 Gly Ser Cys Ser Ser Glu Asp Ser Cys Leu Cys Cys Cys Cys Gly 120 Ser Gly Glu Cys Ala Asp Cys Asp Leu Pro Cys Asp Leu Asp Cys Gly 130 135 Ile Leu Asp Ala Cys Cys Glu Ser Ala Asp Cys Leu Glu Ile Cys Met

155

Xaa Cys Cys Gly Leu Cys Phe Ser Ser 165

150

<210> 951

<211> 288

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

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<22	:3> x	aa e	equal	s an	y of	the	nat	ural	ly c	ccur	ring	L-a	mino	aci	ds
<22	-														
	1> S														
	2> (3> x			e an	v of	+he	nat	u==1	1		rina	т э	.	aci	ے۔
			quar	3 a.i	y OI	CIIC	nac	urar	ry c	CCUI	11119	ц-a	штио	acı	us
	0> 9														
Met		Asp	Glu			Arg	Val	Pro			Asp	Thr	Lys	_	Met
•				5					10					15	
Gln	Val	Cys	Leu	Leu	Ser	Ala	Met	Pro	Leu	Pro	Val	Ala	Leu	Gln	Thr
			20					25					30		
Arg	Leu	Ala	Lys	Arq	Gly	Ile	Leu	Lvs	His	Leu	Glu	Pro	Glu	Pro	Glu
_		35			•		40					45			
C1	C1	71 -	7 1.		0 3	•		_		_	_	•	_	_	
GIU	50		116	MIA	GIU	45p 55	Tyr	Asp	Asp	Asp	60	vai	Asp	Tyr	Glu
	Thr	Arg	Leu	Glu		Leu	Pro	Pro	Ser		Tyr	Lys	Val	Phe	Asp
65					70					75					80
Pro	Ser	Cys	Gly	Leu	Pro	Tyr	Tyr	Trp	Asn	Ala	Asp	Thr	Asp	Leu	Val
				85			_	_	90		_		•	95	
Sor	Trn.	Len	Sor	Dro	uio	3 ~~	D===	3	C	*** 7	17- 3	m\	•		
Jei	пр	Leu	100	PIO	HIS	Asp	PIO	105	ser	vai	vaı	Thr	Lys 110	ser	Ala
Lys	Lys		Arg	Ser	Ser	Asn		Asp	Ala	Glu	Glu	_	Leu	Asp	Arg
		115					120					125			
Ser	His	Asp	Lys	Ser	Asp	Arg	Gly	His	Asp	Lys	Ser	Asp	Arg	Ser	His
	130					135					140				
Glu	Lvs	Leu	Asp	Ara	Glv	His	Asn	T.vg	Ser	Aen	Ara	Glv	wi.	Asp	T
145				9	150	112.5	nsp	בעם	Der	155	Arg	GLY	ute	ASP	160
Xaa	Asp	Arg	Asp	Arg 165	Glu	Arg	Gly	Tyr		Lys	Val	Asp	Arg	Glu	Arg
				100					170					175	
Glu	Arg	Asp	Arg	Glu	Arg	Asp	Arg	Asp	Arg	Gly	Tyr	Asp	Lys	Ala	Asp
			180					185					190		
Ara	Glu	Glu	Glv	Lvs	Glu	Ara	Ara	His	Hjs	Ara	Ara	Glu	Glu	Leu	Δ1 =
9		195	,	,		7	200			9	9	205	Jau	204	uTG.
D	•	_	_	_	_	_									
PTO	Tyr 210	Pro	Lys	ser	гÀз	Lys 215	Ala	Val	Ser	Arg	Lys 220	Asp	Glu	Glu	Leu

WO 00/55350

910

Asp Pro Met Asp Pro Ser Ser Tyr Ser Xaa Arg Pro Arg Gly Thr Trp 225 230 235 240

Ser Thr Gly Leu Pro Lys Arg Asn Glu Ala Lys Thr Gly Ala Asp Thr 245 250 255

Thr Ala Ala Gly Pro Leu Phe Gln Gln Arg Pro Tyr Pro Ser Pro Gly 260 265 270

Ala Val Leu Arg Ala Asn Ala Glu Ala Ser Arg Thr Lys Gln Gln Asp 275 280 285

<210> 952

<211> 323

<212> PRT

<213> Homo sapiens

<400> 952

Val Gly Gly Val Leu Pro Gly Trp Lys Leu Arg Pro Arg Ser Asp Gly
1 5 10 15

Gly Leu Ser Glu Asp Gly Pro Gly Arg Asp His Gly Gly Gly Ser Arg 20 25 30

Gly Gly Arg Gly Gly Ala Ala Gly Gly Arg Gly Gly Cys Gly Pro Gln 35 40 45

Gly Ala Val Gly Gly Met Ala Arg Ala Ser Ser Gly Asn Gly Ser 50 55 60

Glu Glu Ala Trp Gly Ala Leu Arg Ala Pro Gln Gln Gln Leu Arg Glu 65 70 75 80

Leu Cys Pro Gly Val Asn Asn Gln Pro Tyr Leu Cys Glu Ser Gly His
85 90 95

Cys Cys Gly Glu Thr Gly Cys Cys Thr Tyr Tyr Tyr Glu Leu Trp Trp
100 105 110

Phe Trp Leu Leu Trp Thr Val Leu Ile Leu Phe Ser Cys Cys Cys Ala 115 120 125

Phe Arg His Arg Arg Ala Lys Leu Arg Leu Gln Gln Gln Gln Arg Gln 130 135 140

Arg Glu Ile Asn Leu Leu Ala Tyr His Gly Ala Cys His Gly Ala Gly

145	i				150)				155	6				160
Pro	Phe	e Pro	Th:	6 Gly		Leu	Leu	Asp	170		Phe	Leu	ı Sei	Th:	Phe
Lys	Pro	Pro) Ala		Glu	Asp	Val	. Val		Arg	Pro	Gly	Th:		Pro
Pro	Pro	Туг 195		· Val	. Ala	Pro	Gly 200		Pro	Leu	Thr	Ala 205		Ser	Glu
Gln	Thr 210	Cys	суя	Ser	Ser	Ser 215	Ser	Ser	Cys	Pro	Ala 220		Phe	Glu	Gly
Thr 225	Asn	Val	Glu	Gly	Val 230		Ser	His	Gln	Ser 235		Pro	Pro	His	Gln 240
Glu	Gly	Glu	Pro	Gly 245		Gly	Val	Thr	Pro 250	Ala	Ser	Thr	Pro	Pro 255	Ser
Cys	Arg	Tyr	Arg 260		Leu	Thr	Gly	Asp 265	Ser	Gly	Ile	Glu	Leu 270	Cys	Pro
Суз	Pro	Ala 275	Ser	Gly	Glu	Gly	Glu 280	Pro	Val	Lys	Glu	Val 285	Arg	Val	Ser
Ala	Thr 290		Pro	Asp	Leu	Glu 295	Asp	Tyr	Ser	Pro	Cys 300	Ala	Leu	Pro	Pro
Glu 305	Ser	Val	Pro	Gln	Ile 310	Phe	Pro	Met	Gly	Leu 315	Ser	Ser	Ser	Glu	Gly 320
Asp	Ile	Pro													
<210															
<211															
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<213	> Ho	omo s	sapie	ens											
<400	> 95	53													
Ala 1	Lys	Met	Ser	Val 5	Asn	Val	Asn	Arg	Ser 10	Val	Ser	Asp	Gln	Phe 15	Tyr
Arg	Tyr	Lys	Met 20	Pro	Arg	Leu	Ile	Ala 25	Lys	Val	Glu	Gly	Lys 30	Gly	Asn
Sly	Ile	Lys 35	Thr	Val	Ile	Val .	Asn 40	Met	Val .	Asp	Val .	Ala 45	Lys	Ala	Leu

Asn	Arg 50		Pro	Thr	туг	Pro 55	Thr	Lys	Tyr	Phe	Gly 60		Glu	Leu	Gly
Ala 65		Thr	Gln	Phe	Asp 70	Val	Lys	Asn	Asp	Arg 75	Tyr	Ile	Val	Asn	Gly 80
Ser	His	Glu	Ala	Asn 85	Lys	Leu	Gln	Asp	Met 90		Asp	Gly	Phe	Ile 95	Lys
Lys	Phe	Val	Leu 100		Pro	Glu	Cys	Glu 105	Asn	Pro	Glu	Thr	Asp 110	Leu	His
Val	Asn	Pro 115	Lys	Lys	Gln	Thr	Ile 120	Gly	Asn	Ser	Cys	Lys 125	Ala	Cys	Gly
Tyr	Arg 130	Gly	Met	Leu	Asp	Thr 135	His	His	Lys	Leu	Cys 140	Thr	Phe	Ile	Leu
Lys 145	Asn	Pro	Pro	Glu	Asn 150	Ser	Asp	Ser	Gly	Thr 155	Gly	Lys	Lys	Glu	Lys 160
Glu	Lys	Lys	Asn	Arg 165	Lys	Gly	Lys	Asp	Lys 170	Glu	Asn	Gly	Ser	Val 175	Ser
Ser	Ser	Glu	Thr 180	Pro	Pro	Pro	Pro	Pro 185	Pro	Pro	Asn	Glu	Ile 190	Asn	Pro
Pro	Pro	His 195	Thr	Met	Glu	Glu	Glu 200	Glu	Asp	Asp	Asp	Trp 205	Gly	Glu	Asp
Thr	Thr 210	Glu	Glu	Ala	Gln	Arg 215	Arg	Arg	Met	Asp	Glu 220	Ile	Ser	Asp	His
Ala 225	Lys	Val	Leu	Thr	Leu 230	Ser	Asp	Asp	Leu	Glu 235	Arg	Thr	Ile	Glu	Glu 240
Arg	Val	Asn	Ile	Leu 245	Phe	Asp	Phe	Val	Lys 250	Lys	Lys	Lys	Glu	Glu 255	Gly
Val	Ile	Asp	Ser 260	Ser	Asp	Lys	Glu	Ile 265	Val	Ala	Glu	Ala	Glu 270	Arg	Leu
Asp	Val	Lys 275	Ala	Met	Gly	Pro	Leu 280	Val	Leu	Thr	Glu	Val 285	Leu	Phe	Asn
Glu	Lys 290	Ile	Arg	Glu	Gln	Ile 295	Lys	Lys	Tyr	Arg	Arg 300	His	Phe	Leu	Arg
Phe 305	Cys	His	Asn	Asn	Lys 310	Lys	Ala	Gln	Arg	Tyr 315	Leu	Leu	His	-	Leu 320

Glu Cys Val Val Ala Met His Gln Ala Gln Leu Ile Ser Lys Ile Pro 325 330 335

His Ile Leu Lys Glu Met Tyr Asp Ala Asp Leu Leu Glu Glu Glu Val 340 345 350

Ile Ile Ser Trp Ser Glu Lys Ala Ser Lys Lys Tyr Val Ser Lys Glu 355 360 365

Leu Ala Lys Glu Ile Arg Val Lys Ala Glu Pro Phe Ile Lys Trp Leu 370 375 380

Lys Glu Ala Glu Glu Glu Ser Ser Gly Gly Glu Glu Glu Asp Glu Asp 385 390 395 400

Glu Asn Ile Glu Val Val Tyr Ser Lys Ala Ala Ser Val Pro Lys Val 405 410 415

Glu Thr Val Lys Ser Asp Asn Lys Asp Asp Ile Asp Ile Asp Ala
420 425 430

Ile

<210> 954

<211> 428

<212> PRT

<213> Homo sapiens

<400> 954

Gly Tyr Gln Ile Gly Met Ala Leu Ala Ser Gly Pro Ala Arg Arg Ala 1 5 10 15

Leu Ala Gly Ser Gly Gln Leu Gly Leu Gly Gly Phe Gly Ala Pro Arg
20 25 30

Arg Gly Ala Tyr Glu Trp Gly Val Arg Ser Thr Arg Lys Ser Glu Pro 35 40 45

Pro Pro Leu Asp Arg Val Tyr Glu Ile Pro Gly Leu Glu Pro Ile Thr 50 55 60

Phe Ala Gly Lys Met His Phe Val Pro Trp Leu Ala Arg Pro Ile Phe 65 70 75 80

Pro Pro Trp Asp Arg Gly Tyr Lys Asp Pro Arg Phe Tyr Arg Ser Pro 85 90 95

Pro	Leu	His	Glu 100	His	Pro	Leu	Tyr	Lys 105	_	Gln	Ala	Cys	Туг 110		Phe
His	His	Arg 115	Cys	Arg	Leu	Leu	Glu 120	Gly	Val	Lys	Gln	Ala 125		Trp	Lei
Thr	Lys 130		Lys	Leu	Ile	Glu 135	Gly	Leu	Pro	Glu	Lys 140		Leu	Ser	Leu
Val 145	Asp	Asp	Pro	Arg	Asn 150	His	Ile	Glu	Asn	Gln 155	Asp	Glu	Cys	Val	Le:
Asn	Val	Ile	Ser	His 165	Ala	Arg	Leu	Trp	Gln 170	Thr	Thr	Glu	Glu	Ile 175	Pro
Lys	Arg	Glu	Thr 180	Tyr	Cys	Pro	Val	Ile 185	Val	Asp	Asn	Leu	11e 190	Gln	Leu
		195					His 200					205			
	210					215	Ala				220				
Leu 225	Gln	Val	Arg	Gly	Ser 230	Gly	Gly	Ala	Arg	Leu 235	Ser	Thr	Lys	Asp	Pro 240
				245			Glu		250				_	255	
			260				Ile	265					270		
		275					Asn 280					285		_	
	290					295	Leu				300				
305					310		Asp			315		_			320
				325			Ala		330					335	
			340				Pro	345					350		
Asp	Gly	Arg 355	Val	Phe	His	Phe	Leu 360	Val	Phe	Gln	Leu	Asn 365	Thr	Thr	Asp

Leu Asp Ser Asn Glu Gly Val Lys Asn Leu Ala Trp Val Asp Ser Asp 370 375 380

Gln Leu Leu Tyr Gln His Phe Trp Cys Leu Pro Val Ile Lys Lys Arg 385 390 395 400

Val Val Glu Pro Val Gly Pro Val Gly Phe Lys Pro Glu Thr Phe 405 410 415

Arg Lys Phe Leu Ala Leu Tyr Leu His Gly Ala Ala 420 425

<210> 955

<211> 169

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (131)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (140)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (166)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 955

Asp Pro Arg Val Arg Pro Arg Val Arg Pro Arg Val Arg Glu Pro Gly
1 5 10 15

Asp Arg Met Leu Val Leu Val Leu Gly Asp Leu His Ile Pro His Arg 20 25 30

Cys Asn Ser Leu Pro Ala Lys Phe Lys Lys Leu Leu Val Pro Gly Lys
35 40 45

Ile Gln His Ile Leu Cys Thr Gly Asn Leu Cys Thr Lys Glu Ser Tyr 50 55 60

Asp Tyr Leu Lys Thr Leu Ala Gly Asp Val His Ile Val Arg Gly Asp 65 70 75 80

Phe Asp Glu Asn Leu Asn Tyr Pro Glu Gln Lys Val Val Thr Val Gly

85 90 95

Gln Phe Lys Ile Gly Leu Ile His Gly His Gln Val Ile Pro Trp Gly
100 105 110

Asp Met Ala Ser Leu Ala Leu Leu Gln Arg Gln Phe Asp Val Asp Île 115 120 125

Leu Ile Xaa Gly His Thr His Lys Phe Glu Ala Xaa Glu His Glu Asn 130 135 140

Glu Thr Asn Ile Ile Xaa Ser Leu Cys 165

<210> 956

<211> 39

<212> PRT

<213> Homo sapiens

<400> 956

Ser Pro Tyr Cys Gly Leu Gln Val Met Leu Phe Leu Leu His His Thr
1 5 10 15

Leu Trp Cys Leu Leu Pro Cys Ala Ser Ser Leu Arg Leu Ile Lys Lys 20 25 30

Val Ser Arg Leu Leu Gln Leu 35

<210> 957

<211> 219

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 957 Gln Gly His Cys Gly Cys Xaa Leu Xaa Ser Leu Leu Ala Asn Gly His 10 Asp Leu Ala Ala Ala Met Ala Val Asp Lys Ser Asn Pro Thr Ser Lys 25 His Lys Ser Gly Ala Val Ala Ser Leu Leu Ser Lys Ala Glu Arg Ala 40 Thr Glu Leu Ala Ala Glu Gly Gln Leu Thr Leu Gln Gln Phe Ala Gln Ser Thr Glu Met Leu Lys Arg Val Val Gln Glu His Leu Pro Leu Met Ser Glu Ala Gly Ala Gly Leu Pro Asp Met Glu Ala Val Ala Gly Ala Glu Ala Leu Asn Gly Gln Ser Asp Phe Pro Tyr Leu Gly Ala Phe Pro 105 Ile Asn Pro Gly Leu Phe Ile Met Thr Pro Ala Gly Val Phe Leu Ala 115 120 125 Glu Ser Ala Leu His Met Ala Gly Leu Ala Glu Tyr Pro Met Gln Gly Glu Leu Ala Ser Ala Ile Ser Ser Gly Lys Lys Lys Arg Lys Arg Cys 155 Gly Met Cys Ala Pro Cys Arg Arg Ile Asn Cys Glu Gln Cys Ser 165 Ser Cys Arg Asn Arg Lys Thr Gly His Gln Ile Cys Lys Phe Arg Lys 185 Cys Glu Glu Leu Lys Lys Pro Ser Ala Ala Leu Glu Lys Val Met

200

Leu Pro Thr Gly Ala Ala Phe Arg Trp Phe Gln

215

<210> 958

210

<211> 259

<212> PRT

<213> Homo sapiens

<220>

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	:1> s	TME													
	2> (1						.		•	_			
-42	3/ X	aa e	qual	s an	у ог	tne	nat	uraı	ту о	ccur	ring	L-a	wrno	acı	as
- 4 0	^- ^														
	0> 9					_			_			_			
		GIR	ASN	•		Leu	GLu	Ala	_		Ala	Lys	Arg	_	Tyr
1				5					10					15	
		_									_				
гÃа	Leu	Pro			Arg	Lys	Thr	_		Thr	Ile	Ala	_	Val	Val
			20					25					30		
_	_							_							
Tyr	Lys			Ile	Val	Leu		Ala	Asp	Thr	Arg			Glu	Gly
		35					40					45			
Met			Ala	Asp	Lys		Cys	Ser	Lys	Ile		Phe	Ile	Ser	Pro
	50					55					60				
	Ile	Tyr	Cys	Cys		Ala	Gly	Thr	Xaa	Ala	Asp	Thr	Asp	Met	Thr
65					70					75					80
Thr	Gln	Leu	Ile	Ser	Ser	Asn	Leu	Glu	Leu	His	Ser	Leu	Ser	Thr	Gly
				85					90					95	
Arg	Leu	Pro	Arg	Val	Val	Thr	Ala	Asn	Arg	Met	Leu	Lys	Gln	Met	Leu
			100					105					110		
Phe	Arg	Tyr	Gln	Gly	Tyr	Ile	Gly	Ala	Ala	Leu	Val	Leu	Gly	Gly	Val
		115					120					125			
Asp	Val	Thr	Gly	Pro	His	Leu	Tyr	Ser	Ile	Tyr	Pro	His	Gly	Ser	Thr
	130					135					140		_		
Asp	Lys	Leu	Pro	Tyr	Val	Thr	Met	Gly	Ser	Gly	Ser	Leu	Ala	Ala	Met
145					150			_		155					160
									•						
Ala	Val	Phe	Glu	Asp	Lys	Phe	Arg	Pro	Asp	Met	Glu	Glu	Glu	Glu	Ala
				165	•		•		170					175	
Lvs	Asn	Leu	Val	Ser	Glu	Ala	Tle	Ala	Ala	Glv	Tle	Phe	Asn	Agn	T.em
•			180					185		-1			190	пор	1 10
								-00					170		
Glv	Ser	Glv	Ser	Agn	Tlo	Aen	Len	Cve	V= 1	Tla	Ser	T.ve	Don	Luc	T ou
1		195	JU1		~==	no þ	200	-ys	A CT T	116	261	205	กรแ	πλa	ren
		- , ,					200					203			
Asp	Phe	Len	Arg	Pro	ጥህታ	ጥኮ~	17 = 1	Dro	Don	T.ve	T.v.o	G1••	mh~	A~~	T 0**
	210		9	- 10	- 7 -	215	Val	210	HOII	ב עם	220	GIY	THE	ary	nea
						213					440				

Gly Arg Tyr Arg Cys Glu Lys Gly Thr Thr Ala Val Leu Thr Glu Lys 225 230 235 240

Ile Thr Pro Leu Glu Ile Glu Val Leu Glu Glu Thr Val Gln Thr Met 245 250 255

Asp Thr Ser

<210> 959

<211> 75

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (36)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (41)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (53)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 959

Phe Trp Ser Ala Ala Lys Phe Asp Phe Thr Ser His Thr Pro Phe Leu

1 5 10 15

Pro Leu Glu Met Gln Phe Arg Gln Arg Pro Cys Gly Glu Ser Cys Asn 20 25 30

Ile Lys Phe Xaa Phe Arg Arg Ser Xaa Pro Gln Thr Ser Glu Pro Leu 35 40 45

Ala Val Leu Pro Xaa Asn Lys Asn Glu Leu Glu Lys Lys Val Ala Gln 50 55

Leu Gln Arg Ser Lys Ser Ser Tyr Phe Pro Thr 65 70 75

<211> 128 <212> PRT <213> Homo sapiens

<400> 960

Gln Ser Arg Gly Leu Arg Leu Leu Gly Pro Gly Asp Gly Ala Gly Met
1 5 10 15

Thr Pro Gly Val Val His Ala Ser Pro Pro Gln Ser Gln Arg Val Pro 20 25 30

Arg Gln Ala Pro Cys Glu Trp Ala Ile Arg Asn Ile Gly Gln Lys Pro $35 \hspace{1cm} 40 \hspace{1cm} 45 \hspace{1cm}$

Lys Glu Pro Asn Cys His Asn Cys Gly Thr His Ile Gly Leu Arg Ser 50 55 60

Lys Thr Leu Arg Gly Thr Pro Asn Tyr Leu Pro Ile Arg Gln Asp Thr 65 70 75 80

His Pro Pro Ser Val Ile Phe Cys Leu Ala Gly Val Gly Val Pro Gly $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$

Gly Thr Cys Arg Pro Ala Pro Cys Val Pro Arg Phe Ala Ala Leu Pro 100 105 110

Trp Ala Thr Asn His Pro Gly Pro Gly Cys Leu Ser Asp Leu Arg Ala 115 120 125

<210> 961

<211> 564

<212> PRT

<213> Homo sapiens

<400> 961

Lys Met Lys Ser Val Lys Ile Ala Phe Ala Val Thr Leu Glu Thr Val

Leu Ala Gly His Glu Asn Trp Val Asn Ala Val His Trp Gln Pro Val 20 25 30

Phe Tyr Lys Asp Gly Val Leu Gln Gln Pro Val Arg Leu Leu Ser Ala 35 40

Ser Met Asp Lys Thr Met Ile Leu Trp Ala Pro Asp Glu Glu Ser Gly 50 60

Val 65	Trp	Leu	Glu	Gln	Val 70		Val	Gly	Glu	Val 75	_	Gly	Asn	Thr	Leu 80
Gly	Phe	Tyr	Asp	Cys 85		Phe	Asn	Glu	Asp 90	_	Ser	Met	Ile	Ile 95	Ala
His	Ala	Phe	His 100		Ala	Leu	His	Leu 105	Trp	Lys	Gln	Asn	Thr 110	Val	Asn
Pro	Arg	Glu 115		Thr	Pro	Glu	Ile 120		Ile	Ser	Gly	His 125	Phe	Asp	Gly
Val	Gln 130		Leu	Val	Trp	Asp 135	Pro	Glu	Gly	Glu	Phe 140	Ile	Ile	Thr	Val
Gly 145	Thr	Asp	Gln	Thr	Thr 150	Arg	Leu	Phe	Ala	Pro 155		Lys	Arg	Lys	Asp 160
Gln	Ser	Gln	Val	Thr 165	Trp	His	Glu	Ile	Ala 170	Arg	Pro	Gln	Ile	His 175	Gly
Tyr	Asp	Leu	Lys 180	Cys	Leu	Ala	Met	Ile 185	Asn	Arg	Phe	Gln	Phe 190	Val	Ser
Gly	Ala	Asp 195	Glu	Lys	Val	Leu	Arg 200	Val	Phe	Ser	Ala	Pro 205	Arg	Asn	Phe
Val	Glu 210	Asn	Phe	Суз	Ala	Ile 215	Thr	Gly	Gln	Ser	Leu 220	Asn	His	Val	Leu
Cys 225	Asn	Gln	Asp	Ser	Asp 230	Leu	Pro	Glu	Gly	Ala 235	Thr	Val	Pro	Ala	Leu 240
Gly	Leu	Ser	Asn	Lys 245	Ala	Val	Phe	Gln	Gly 250	Asp	Ile	Ala	Ser	Gln 255	Pro
Ser	Asp	Glu	Glu 260	Glu	Leu	Leu	Thr	Ser 265	Thr	Gly	Phe	Glu	Tyr 270	Gln	Gln
Val	Ala	Phe 275	Gln	Pro	Ser	Ile	Leu 280	Thr	Glu	Pro	Pro	Thr 285	Glu	Asp	His
Leu	Leu 290	Gln	Asn	Thr	Leu	Trp 295	Pro	Glu	Val	Gln	Lys 300	Leu	Tyr	Gly	His
31y 305	Tyr	Glu	Ile	Phe	Cys 310	Val	Thr	Cys	Asn	Ser 315	Ser	Lys	Thr	Leu	Leu 320
Ala	Ser	Ala	Cys	Lys 325	Ala	Ala	Lys	Lys	Glu 330	His	Ala	Ala		Ile 335	Leu

- Trp Asn Thr Thr Ser Trp Lys Gln Val Gln Asn Leu Val Phe His Ser 340 345 350
- Leu Thr Val Thr Gln Met Ala Phe Ser Pro Asn Glu Lys Phe Leu Leu 355 360 365
- Ala Val Ser Arg Asp Arg Thr Trp Ser Leu Trp Lys Lys Gln Asp Thr 370 375 380
- Ile Ser Pro Glu Phe Glu Pro Val Phe Ser Leu Phe Ala Phe Thr Asn 385 390 395 400
- Lys Ile Thr Ser Val His Ser Arg Ile Ile Trp Ser Cys Asp Trp Ser 405 410 415
- Pro Asp Ser Lys Tyr Phe Phe Thr Gly Ser Arg Asp Lys Lys Val Val 420 425 430
- Val Trp Gly Glu Cys Asp Ser Thr Asp Asp Cys Ile Glu His Asn Ile 435 440 445
- Gly Pro Cys Ser Ser Val Leu Asp Val Gly Gly Ala Val Thr Ala Val 450 460
- Ser Val Cys Pro Val Leu His Pro Ser Gln Arg Tyr Val Val Ala Val 465 470 475 480
- Gly Leu Glu Cys Gly Lys Ile Cys Leu Tyr Thr Trp Lys Lys Thr Asp 485 490 495
- Gln Val Pro Glu Ile Asn Asp Trp Thr His Cys Val Glu Thr Ser Gln 500 505 510
- Ser Gln Ser His Thr Leu Ala Ile Arg Lys Leu Cys Trp Lys Asn Cys 515 520 525
- Ser Gly Lys Thr Glu Gln Lys Glu Ala Glu Gly Ala Glu Trp Leu His 530 540
- Phe Ala Ser Cys Gly Glu Asp His Thr Val Lys Ile His Arg Val Asn 545 550 555 560

Lys Cys Ala Leu

<210> 962

<211> 43

<212> PRT

<213> Homo sapiens

<400> 962

Phe Lys Tyr Val Lys Cys Gly Ser Phe Thr Pro His His Ser Glu His

1 5 10 15

Thr Gly Glu Met Cys Phe Phe Gly Lys Leu Lys Gly Ala Ser Ser Leu 20 25 30

Ile Gln Arg Asn Ile Ser His Val Cys Ser Phe 35 40

<210> 963

<211> 132

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (131)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 963

Glu Ser Arg Val Asp Pro Arg Val Arg Glu Arg Ser Ala Arg Thr Ala
1 5 10 15

Gly Ala Thr Val Gly Pro Ala Ala Val Met Ser Val Leu Arg Pro Leu 20 25 30

Asp Lys Leu Pro Gly Leu Asn Thr Ala Thr Ile Leu Leu Val Gly Thr 35 40

Glu Asp Ala Leu Leu Gln Gln Leu Ala Asp Ser Met Leu Lys Glu Asp 50 55 60

Cys Ala Ser Glu Leu Lys Val His Leu Ala Lys Ser Leu Pro Leu Pro 65 70 75 80

Ser Ser Val Asn Arg Pro Arg Ile Asp Leu Ile Val Phe Val Val Asn 85 90 95

Leu His Ser Lys Tyr Ser Leu Gln Asn Thr Glu Glu Ser Leu Arg His 100 105 110

Val Asp Ala Ser Phe Phe Leu Gly Lys Val Cys Phe Leu Ala Thr Gly
115 120 125

Gly Gly Xaa Leu 130

~21	0- 5	04													
<21	1> 1	75													
<21	2> P	RT													
			sapi	ens											
<22	0>														
<22	1> s	ITE													
<22	2> (13)													
		-	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
<22	0>														
<22	1> S	ITE													
<22	2> (721													
			qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
	0> 9														
His	Glu	Arg	Ser	Cys	Cys	Asp	Ala	Arg	Ser	Glu	Ala	Xaa	Gln	Gly	Arg
1				5					10					15	
Glv	Arg	Val	Glv	Ala	Glv	Ala	Glv	Ala	Ala	Trp	Ser	Ser	Cvs	Glv	Val
,	9		20		1		011	25		115	Der	JCI	30	GLY	Val
			20					23					30		
Ser	Glv	Pro	Glv	Arg	Glv	Met	Glv	Val	Leu	Ala	Ala	Ala	Ala	Ara	Cys
	2	35	1	9	1		40					45	2124	y	Cys
							40					43			
Leu	Val	Ara	Glv	Ala	Asp	Ara	Met	Ser	T.vg	Trn	Thr	Ser	T.ve	Ara	Gly
	50	9	7			55			_,,		60	001	בעם	nry	Gry
						33					00				
Pro	Ara	Ser	Phe	Ara	Glv	Ara	Yaa	Glv	Ara	Glv	A1 a	T.ve	Glu	Tlo	Gly
65				9	70	my	naa	GLY	nry	75	nia	цуз	GIA	TIE	_
0,5					, 0					13					80
Phe	Len	ጥኮተ	Ser	Glv	Trp	Ara	Dhe	Va 1	Gln	Tla	Tvo	Gl.v	Mot	Wa I	Dro
				85		9	1110	val	90	116	ny a	GIU	rie c		PIO
				0,5					90					95	
Glu	Phe	Va 1	Val	Pro	Asn	T.e.11	Thr	Glv	Dha	Luc	Len	T wa	Dro	m	Val
			100		no P	DCu	1111	105	riie	mys	neu	гуз		TYL	vai
			100					105					110		
Ser	ጥህተ	T.eu	Δla	Pro	Glu	Sar	Glu	Glu	mh~	Dro	T 011	mb=	210	23-	G1-
561	- 7 -	115	A.C	FIU	Giu	Ser		GIU	THE	PIO	Leu		Ата	Ala	GIN
		113					120					125			
T 011	Dho	C	C1	27-	*** 7		D	• • •	~1.					_	_
ren		ser	GIU	ATG	Val		PIO	ATA	пе	GIu		Asp	Phe	Lys	Asp
	130					135			•		140				
G1++	መኮ 🕶	Dho	N	Dwa	200	N ===	T	~1	•	m	~ 3 · · ·	mk -			
	THE	rne	ASP	Pro	Asp	ASN	reu	GIU	гÀ2		GTÅ	Fue	GIU	Pro	
145					150					155					160
<i>c</i> 1 ~	G1	c1	T	T	Db -	~ 1 =		M	.	_		-1	_	_	
GIII	GIU	GTÅ	гÀ2		Phe	GTU	ьeu	TYT		Arg	ASN	Pne	Leu		
				165					170					175	

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<210> 965
<211> 363
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (356)
<223> Xaa equals any of the naturally occurring L-amino acids
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Lys Arg Lys Pro Ser Pro Gly Pro Gly Ser Leu Asp Leu Val Ser Leu
Gly Ser Gly Asn Ser Gly Ser Gln Arg Thr Val Leu Ile Met Asp Lys
Gln Asn Ser Gln Met Asn Ala Ser His Pro Glu Thr Asn Leu Pro Val
                         55
Gly Tyr Pro Pro Gln Tyr Pro Pro Thr Ala Phe Gln Gly Pro Pro Gly
                     70
Tyr Ser Gly Tyr Pro Gly Pro Gln Val Ser Tyr Pro Pro Pro Pro Ala
                 85
                                     90
Gly His Ser Gly Pro Gly Pro Ala Gly Phe Pro Val Pro Asn Gln Pro
                                105
Val Tyr Asn Gln Pro Val Tyr Asn Gln Pro Val Gly Ala Ala Gly Val
                            120
Pro Trp Met Pro Ala Pro Gln Pro Pro Leu Asn Cys Pro Pro Gly Leu
                        135
Glu Tyr Leu Ser Gln Ile Asp Gln Ile Leu Ile His Gln Gln Ile Glu
                   150
                                        155
Leu Leu Glu Val Leu Thr Gly Phe Glu Thr Asn Asn Lys Tyr Glu Ile
                165
                                    170
Lys Asn Ser Phe Gly Gln Arg Val Tyr Phe Ala Ala Glu Asp Thr Asp
Cys Cys Thr Arg Asn Cys Cys Gly Pro Ser Arg Pro Phe Thr Leu Arg
```

Ile	Ile 210	_	Asn	Met	Gly	Gln 215		Val	Ile	Thr	Leu 220		Arg	Pro	Leu
Arg 225	Cys	Ser	Ser	Cys	Cys 230	Суз	Pro	Cys	Cys	Leu 235		Glu	Ile	Glu	11e 240
Gln	Ala	Pro	Pro	Gly 245	Val	Pro	Ile	Gly	Туг 250		Ile	Gln	Thr	Trp 255	
Pro	Cys	Leu	Pro 260	_	Phe	Thr	Ile	Gln 265		Glu	Lys	Arg	Glu 270	Asp	Val
Leu	Lys	Ile 275	Ser	Gly	Pro	Cys	Val 280	Val	Cys	Ser	Cys	Cys 285	-	Asp	Val
Asp	Phe 290	Glu	Ile	Lys	Ser	Leu 295	Asp	Glu	Gln	Cys	Val 300	Val	Gly	Lys	Ile
Ser 305	Lys	His	Trp	Thr	Gly 310	Ile	Leu	Arg	Glu	Ala 315	Phe	Thr	Asp	Ala	Asp 320
Asn	Phe	Gly	Ile	Gln 325	Phe	Pro	Leu	Asp	Leu 330	Asp	Val	Lys	Met	Lys 335	Ala
Val	Met	Ile	Gly 340	Ala	Суз	Phe	Leu	Ile 345	Asp	Phe	Met	Phe	Phe 350	Glu	Ser
Thr	Gly	Ser 355	Xaa	Glu	Gln	Lys	Ser 360	Gly	Val	Trp					
<21	0> 96 l> 13 2> PF	31													
	3> Ho		sapie	ens											
)> 96 Glu		His	Thr 5	Arg	Lys	Gln		Pro 10		Ala	Glu	Pro	Ala 15	Ala
Met	Ser	Gly	Glu 20	Pro	Gly	Gln	Thr	Ser 25	Val	Ala	Pro	Pro	Pro 30	Glu	Glu
Val	Glu	Pro 35	Gly	Ser	Gly	Val	Arg 40	Ile	Val	Val	Glu	Tyr 45	Cys	Glu	Pro
Суз	Gly 50	Phe	Glu	Ala	Thr	Tyr 55	Leu	Glu	Leu	Ala	Ser 60	Ala	Val	Lys	Glu

Gln Tyr Pro Gly Ile Glu Ile Glu Ser Arg Leu Gly Gly Thr Gly Ala Phe Glu Ile Glu Ile Asn Gly Gln Leu Val Phe Ser Lys Leu Glu Asn 90 Gly Gly Phe Pro Tyr Glu Lys Asp Leu Ile Glu Ala Ile Arg Arg Ala 100 105 Ser Asn Gly Glu Thr Leu Glu Lys Ile Thr Asn Ser Arg Pro Pro Cys 120 Val Ile Leu 130 <210> 967 <211> 344 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (68) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (306) <223> Xaa equals any of the naturally occurring L-amino acids <400> 967 Pro Thr Pro Ala Ser His Ser Pro Ser Pro Ser Leu Pro Ala Leu Pro Pro Ser Pro Pro His Arg Pro Asp Ser Pro Leu Phe Asn Ser Arg Cys 20 25 Ser Ser Pro Leu Gln Leu Asn Leu Leu Gln Leu Glu Glu Leu Pro Arg 40 Ala Glu Gly Ala Ala Val Ala Gly Gly Pro Gly Ser Ser Ala Gly Pro Pro Pro Pro Xaa Ala Glu Ala Ala Glu Pro Glu Ala Arg Leu Ala Glu 65

Val Thr Glu Ser Ser Asn Gln Asp Ala Leu Ser Gly Ser Ser Asp Leu

ren	GIU	Leu	100		GIn	Glu	Asp	Ser 105	_	ser	Gly	Thr	110		Ala
Ala	Ser	Gly 115		Leu	Gly	Ser	Gl <u>y</u> 120		Gly	Ser	Gly	Ser 125	_	Ser	Gly
Ser	His 130		Gly	Gly	Ser	Thr 135	Ser	Ala	Ser	Ile	Thr 140	_	Ser	Ser	Glı
Ser 145	Ser	His	Thr	Ser	Lys 150	Tyr	Phe	Gly	Ser	Ile 155		Ser	Ser	Glu	Ala 160
Glu	Ala	Gly	Ala	Ala 165	Arg	Gly	Gly	Ala	Glu 170	Pro	Gly	Asp	Gln	Val 175	Ile
Lys	Tyr	Val	Leu 180	Gln	Asp	Pro	Ile	Trp 185	Leu	Leu	Met	Ala	Asn 190	Ala	Asp
Gln	Arg	Val 195	Met	Met	Thr	Tyr	Gln 200	Val	Pro	Ser	Arg	Asp 205	Met	Thr	Ser
Val	Leu 210	Lys	Gln	Asp	Arg	Glu 215	Arg	Leu	Arg	Ala	Met 220	Gln	Lys	Gln	Glm
Pro 225	Arg	Phe	Ser	Glu	Asp 230	Gln	Arg	Arg	Glu	Leu 235	Gly	Ala	Val	His	Ser 240
Trp	Val	Arg	Lys	Gly 245	Gln	Leu	Pro	Arg	Ala 250	Leu	Asp	Val	Met	Ala 255	Cys
Val	Asp	Cys	Gly 260	Ser	Ser	Thr	Gln	Asp 265	Pro	Gly	His	Pro	Asp 270	Asp	Pro
Leu	Phe	Ser 275	Glu	Leu	Asp	Gly	Leu 280	Gly	Leu	Glu	Pro	Met 285	Glu	Glu	Gly
Gly	Gly 290	Glu	Gln	Gly	Ser	Ser 295	Gly	Gly	Gly	Ser	Gly 300	Glu	Gly	Glu	Gly
Cys 305	Xaa	Glu	Ala	Gln	Gly 310	Gly	Ala	Lys	Ala	Ser 315	Ser	Ser	Gln	Asp	Leu 320
Ala	Met	Glu	Glu	Glu 325	Glu	Glu	Gly	Arg	Ser 330	Ser	Ser	Ser	Pro	Ala 335	Leu

Pro Thr Ala Gly Asn Cys Thr Ser 340

<210> 968 <211> 67 <212> PRT <213> Homo sapiens <400> 968 Arg Cys Ser Ser Phe Phe Leu Ser Leu Leu Val Lys Ile Thr Asn Ile Trp Glu Gly Phe Lys Asp Ala Cys Tyr Gly Ala Asn Val Leu Ser Leu Leu Asn Ser Arg Ser Glu Leu Leu Thr Cys Ile Gln Asn Ile Asn Ala Gln Asn Leu Tyr Met Ser Pro Ile Arg Lys Ile His Trp His Ala Thr Gly Asp Ser 65 <210> 969 <211> 325 <212> PRT <213> Homo sapiens <400> 969

Leu Asn Leu Arg Ser Pro His Ile Cys Phe Arg Ser Ser Lys Pro Ser

40

Trp Ala Asp Gln Val Glu Glu Glu Gly Glu Asp Asp Lys Cys Val Thr

Ser Glu Leu Leu Lys Gly Ile Pro Leu Ala Thr Gly Asp Thr Ser Pro 40 45

Glu Pro Glu Leu Leu Pro Gly Ala Pro Leu Pro Pro Pro Lys Glu Val

Ile Asn Gly Asn Ile Lys Thr Val Thr Glu Tyr Lys Ile Asp Glu Asp 75

Gly Lys Lys Phe Lys Ile Val Arg Thr Phe Arg Ile Glu Thr Arg Lys 90

Ala Ser Lys Ala Val Ala Arg Arg Lys Asn Trp Lys Lys Phe Gly Asn

Ser Glu Phe Asp Pro Pro Gly Pro Asn Val Ala Thr Thr Val Ser

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120 125 115 Asp Asp Val Ser Met Thr Phe Ile Thr Ser Lys Glu Asp Leu Asn Cys 140 135 Gln Glu Glu Glu Asp Pro Met Asn Lys Leu Lys Gly Gln Lys Ile Val 150 145 155 Ser Cys Arg Ile Cys Lys Gly Asp His Trp Thr Thr Arg Cys Pro Tyr 170 Lys Asp Thr Leu Gly Pro Met Gln Lys Glu Leu Ala Glu Gln Leu Gly 185 Leu Ser Thr Gly Glu Lys Glu Lys Leu Pro Gly Glu Leu Glu Pro Val 195 Gln Ala Thr Gln Asn Lys Thr Gly Lys Tyr Val Pro Pro Ser Leu Arg Asp Gly Ala Ser Arg Arg Gly Glu Ser Met Gln Pro Asn Arg Arg Ala 225 230 235 Asp Asp Asn Ala Thr Ile Arg Val Thr Asn Leu Ser Glu Asp Thr Arg 245 250 Glu Thr Asp Leu Gln Glu Leu Phe Arg Pro Phe Gly Ser Ile Ser Arg 265 Ile Tyr Leu Ala Lys Asp Lys Thr Thr Gly Gln Ser Lys Gly Phe Ala 275 Phe Ile Ser Phe His Arg Arg Glu Asp Ala Ala Arg Ala Ile Ala Gly 295 Val Ser Gly Phe Gly Tyr Asp His Leu Ile Leu Asn Val Glu Trp Ala 305 310 315 Lys Pro Ser Thr Asn 325

<210> 970

<211> 357

<212> PRT

<213> Homo sapiens

<400> 970

Val Arg Val Lys Met Ala Ala Ala Glu Ala Ala Asn Cys Ile Met Glu
1 5 10 15

Val	Ser	. Cys	Gly 20	Gln	Ala	Glu	Ser	Ser 25		Lys	Pro	Asn	Ala 30		AS
Met	Thr	Ser 35	_	Asp	туг	Tyr	Phe 40	_	Ser	Tyr	Ala	His 45		Gly	Ile
His	Glu 50		Met	Leu	Lys	Asp 55		Val	Arg	Thr	Leu 60		Tyr	Arg	Ası
Ser 65		Phe	His	Asn	Arg 70	His	Leu	Phe	Lys	Asp 75		Val	Val	Leu	As _l
Val	Gly	Ser	Gly	Thr 85	Gly	Ile	Leu	Cys	Met 90	Phe	Ala	Ala	Lys	Ala 95	_
Ala	Arg	Lys	Val 100	Ile	Gly	Ile	Glu	Cys 105	Ser	Ser	Ile	Ser	Asp 110	Tyr	Ala
		115		Lys			120					125			
	130			Glu		135					140				
145				Trp	150					155					160
				Tyr 165					170					175	
			180	Arg				185					190	_	
		195		Tyr			200					205		Ī	
	210			Ile		215					220				
225				Lys	230					235				-	240
				Thr 245					250					255	
			260	Val				265					270		
туг	rue	275	TTE	Glu	PUG	THE	Arg 280	cys	HIS	rys	Arg	Thr 285	Gly	Phe	Ser

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Thr Ser Pro Glu Ser Pro Tyr Thr His Trp Lys Gln Thr Val Phe Tyr 290 295 Met Glu Asp Tyr Leu Thr Val Lys Thr Gly Glu Glu Ile Phe Gly Thr Ile Gly Met Arg Pro Asn Ala Lys Asn Asn Arg Asp Leu Asp Phe Thr Ile Asp Leu Asp Phe Lys Gly Gln Leu Cys Glu Leu Ser Cys Ser Thr Asp Tyr Arg Met Arg 355 <210> 971 <211> 176 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (10) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (11) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (176) <223> Xaa equals any of the naturally occurring L-amino acids <400> 971 Gly Val Pro Arg Arg Ala Tyr Gln Ala Xaa Xaa Leu Arg Arg Val Asp 10 Asp Phe Lys Lys Ala Phe Ser Lys Glu Lys Met Glu Lys Thr Lys Val 20 25 Arg Thr Arg Glu Asn Leu Glu Lys Thr Arg Leu Lys Thr Lys Glu Asn 40 Leu Glu Lys Thr Arg His Thr Leu Glu Lys Arg Met Asn Lys Leu Gly

Thr Arg Leu Val Pro Ala Glu Arg Arg Glu Lys Leu Lys Thr Ser Arg 80

Asp Lys Leu Arg Lys Ser Phe Thr Pro Asp His Val Val Tyr Ala Arg 95

Ser Lys Thr Ala Val Tyr Lys Val Pro 105

Lys Thr Ala Val Tyr Lys Val Pro 105

Lys Thr Ala Val Tyr Lys Val Pro 105

Lys Ile Arg Glu Gly Gln Val 120

Clu Val Gly Ala Asp Asp Asp Glu Gly Gly Gly Ala Glu Arg Gly Glu Ala 130

Cly Asp Leu Arg Arg Gly Ser Ser Pro Asp Val His Ala Leu Leu Glu 160

Ile Thr Glu Glu Ser Asp Ala Val Leu Val Asp Lys Ser Asp Ser Xaa

170

<210> 972

<211> 159

<212> PRT

<213> Homo sapiens

<400> 972

Gly Lys Ala Arg Arg Arg Ala Ala Lys Leu Gln Ser Ser Gln Glu Pro 1 5 10 15

Glu Ala Pro Pro Pro Arg Asp Val Ala Leu Leu Gln Gly Arg Ala Asn 20 25 30

Asp Leu Val Lys Tyr Leu Leu Ala Lys Asp Gln Thr Lys Ile Pro Ile 35 40 45

Lys Arg Ser Asp Met Leu Lys Asp Ile Ile Lys Glu Tyr Thr Asp Val 50 55 60

Tyr Pro Glu Ile Ile Glu Arg Ala Gly Tyr Ser Leu Glu Lys Val Phe 65 70 75 80

Gly Ile Gln Leu Lys Glu Ile Asp Lys Asn Asp His Leu Tyr Ile Leu 85 90 95

Leu Ser Thr Leu Glu Pro Thr Asp Ala Gly Ile Leu Gly Thr Thr Lys

105 100 110 Asp Ser Pro Lys Leu Gly Leu Leu Met Val Leu Leu Ser Ile Ile Phe 120 Met Asn Gly Asn Arg Ser Ser Glu Ala Val Ile Trp Glu Val Leu Arg 130 Lys Leu Gly Leu Arg Leu Gly Tyr Ile Ile His Ser Leu Gly Thr 150 <210> 973 <211> 233 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <400> 973 Arg Ala Xaa Lys Ala Ala Pro Arg Arg Ala Leu Ala Arg Leu Val Leu Ala Trp Cys Arg Trp Leu Val Ser Ala Thr Cys Val Gly Thr Ala Asp 20 Arg Lys Met Ser Ser Gly Asn Ala Lys Ile Gly His Pro Ala Pro Asn 40 Phe Lys Ala Thr Ala Val Met Pro Asp Gly Gln Phe Lys Asp Ile Ser 50 55 Leu Ser Asp Tyr Lys Gly Lys Tyr Val Val Phe Phe Phe Tyr Pro Leu Asp Phe Thr Phe Val Cys Pro Thr Glu Ile Ile Ala Phe Ser Asp Arg Ala Glu Glu Phe Lys Lys Leu Asn Cys Gln Val Ile Gly Ala Ser Val 100 105 Asp Ser His Phe Cys His Leu Ala Trp Val Asn Thr Pro Lys Lys Gln 120 Gly Gly Leu Gly Pro Met Asn Ile Pro Leu Val Ser Asp Pro Lys Arg

Thr Ile Ala Gln Asp Tyr Gly Val Leu Lys Ala Asp Glu Gly Ile Ser Phe Arg Gly Leu Phe Ile Ile Asp Asp Lys Gly Ile Leu Arg Gln Ile 165 170 Thr Val Asn Asp Leu Pro Val Gly Arg Ser Val Asp Glu Thr Leu Arg Leu Val Gln Ala Phe Gln Phe Thr Asp Lys His Gly Glu Val Cys Pro 200 Ala Gly Trp Lys Pro Gly Ser Asp Thr Ile Lys Pro Asp Val Gln Lys 210 215 Ser Lys Glu Tyr Phe Ser Lys Gln Lys 230 <210> 974 <211> 174 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (37) <223> Xaa equals any of the naturally occurring L-amino acids <400> 974 Ser Trp Asp Arg Arg Leu Met Gln Asp Asp Asn Arg Gly Leu Gly Gln 5 Gly Leu Lys Asp Asn Lys Arg Thr Cys Asn Arg Phe Arg Leu Leu Leu 25 Glu Arg Arg Thr Xaa Gly Ser Glu Val Gln Asp Ser His Ser Thr Ser 40 Tyr Pro Ser Leu Leu Ser His Leu Thr Ser Met Tyr Leu Asn Ala Pro 50 55 Ala Leu Ala Leu Pro Val Ala Arg Met Gln Leu Pro Gly Pro Gly Leu Arg Ser Phe His Pro Leu Ala Ser Ser Leu Pro Cys Asp Phe His Leu

Leu Asn Leu Arg Thr Leu Gln Ala Glu Glu Asp Thr Leu Pro Ser Ala

105

110

Glu Thr Ala Leu Ile Leu His Arg Lys Val Leu Thr Ala Ala Trp Arg 115 120 Gln Glu Leu Gly Leu Gln Leu His His Lys Pro Arg Gln Gly Ser Pro 135 Gly Gln Pro Phe Pro Trp Pro Gly Cys Gly Ile Pro Ser Ala Asn Leu 145 155 150 Leu Asp Val Thr Val Pro Ser Gly Leu Pro Val Gln Gln His 165 170 <210> 975 <211> 380 <212> PRT <213> Homo sapiens

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20 25 30

Leu Pro Val Gly Ala Pro Pro Ala Pro Ala Met Leu Ser Ala Leu Ala 35

Arg Pro Ala Ser Ala Ala Leu Arg Arg Ser Phe Ser Thr Ser Ala Gln 50 60

Asn Asn Ala Lys Val Ala Val Leu Gly Ala Ser Gly Gly Ile Gly Gln 65 75 . 80

Pro Leu Ser Leu Leu Leu Lys Asn Ser Pro Leu Val Ser Arg Leu Thr 85 90 95

Leu Tyr Asp Ile Ala His Thr Pro Gly Val Ala Ala Asp Leu Ser His
100 105 110

Ile Glu Thr Lys Ala Ala Val Lys Gly Tyr Leu Gly Pro Glu Gln Leu 115 120 125

Pro Asp Cys Leu Lys Xaa Cys Asp Val Val Val Ile Pro Ala Gly Val

	130					135					140				
Pro 145	Arg	Lys	Pro	Gly	Met 150	Thr	Arg	Asp	Asp	Leu 155	Phe	Asn	Thr	Asn	Ala 160
Thr	Ile	Val	Ala	Thr 165	Leu	Thr	Ala	Ala	Cys 170	Ala	Gln	His	Суз	Pro 175	Glu
Ala	Met	Ile	Cys	Val	Ile	Ala	Asn	Pro 185	Val	Asn	Ser	Thr	Ile 190	Pro	Ile
Thr	Ala	Glu 195	Val	Phe	Lys	Lys	His 200	Gly	Val	Tyr	Asn	Pro 205	Asn	Lys	Ile
Phe	Gly 210	Val	Thr	Thr	Leu	Asp 215	Ile	Val	Arg	Ala	Asn 220	Thr	Phe	Val	Ala
G1u 225	Leu	Lys	Gly	Leu	Asp 230	Pro	Ala	Arg	Val	Asn 235	Val	Pro	val	Ile	Gly 240
Gly	His	Ala	Gly	Lys 245	Thr	Ile	Ile	Pro	Leu 250	Ile	Ser	Gln	Суз	Thr 255	Pro
Lys	Val	Asp	Phe 260	Pro	Gln	Asp	Gln	Leu 265	Thr	Ala	Leu	Thr	Gly 270	Arg	Ile
Gln	Glu	Ala 275	Gly	Thr	Glu	Val	Val 280	Lys	Ala	Lys	Ala	Gly 285	Ala	Gly	Ser
Ala	Thr 290	Leu	Ser	Met	Ala	Tyr 295	Ala	Gly	Ala	Arg	Phe 300	Val	Phe	Ser	Leu
Val 305	Asp	Ala	Met	Asn	Gly 310	Lys	Glu	Gly	Val	Val 315	Glu	Cys	Ser	Phe	Val 320
Lys	Ser	Gln	Glu	Thr 325	Glu	Cys	Thr	Tyr	Phe 330	Ser	Thr	Pro	Leu	Leu 335	Leu
Gly	Lys	Lys	Gly 340		Glu	Lys		Leu 345	_	Ile	Gly	Lys	Val 350	Ser	Ser
Phe	Glu	Glu 355	Lys	Met	Ile	Ser	Asp 360	Ala	Ile	Pro	Glu	Leu 365	Lys	Ala	Ser
Ile	Lys 370	Lys	Gly	Glu	Ąsp	Phe 375	Val	Lys	Thr	Leu	380 1				

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<21	3> H	omo :	sapi	ens											
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Thr	Ile	Ser	Asn 20	Ile	Ser	Gly	Phe	Asn 25	Glu	Thr	Cys	Leu	Arg 30	Trp	Ar
Ser	Ile	Lys 35	Thr	Ala	Asp	Met	Glu 40	Glu	Met	Tyr	Leu	Phe 45	His	Ile	Tr
Gly	Gln 50	Arg	Trp	Tyr	Gln	Lys 55	Glu	Phe	Ala	Gln	Glu 60	Met	Thr	Phe	Ası
Ile 65	Ser	Ser	Ser	Ser	Arg 70	Asp	Pro	Glu	Val	Cys 75	Leu	Asp	Leu	Arg	Pro
Gly	Thr	Asn	Tyr	Asn 85	Val	Ser	Leu	Arg	Ala 90	Leu	ser	Ser	Glu	Leu 95	Pro
Val	Val	Ile	Ser 100	Leu	Thr	Thr	Gln	Ile 105	Thr	Glu	Pro	Pro	Leu 110	Pro	Gl
Val	Glu	Phe 115	Phe	Thr	Val	His	Arg 120	Gly	Pro	Leu	Pro	Arg 125	Leu	Arg	Let
Arg	Lys 130	Ala	Lys	Glu	Lys	Asn 135	Gly	Pro	Ile	Ser	Ser 140	Tyr	Gln	Val	Let
Val 145	Leu	Pro	Leu	Ala	Leu 150	Gln	Ser	Thr	Phe	Ser 155	Cys	Asp	Ser	Glu	Gl ₃
Ala	Ser	Ser	Phe	Phe 165	Ser	Asn	Ala	Ser	Asp 170	Ala	Asp	Gly	Tyr	Val 175	Ala
Ala	Glu	Leu	Leu 180	Ala	Lys	Asp	Val	Pro 185	Asp	Asp	Ala	Met	Glu 190	Ile	Pro
Ile	Gly	Asp 195	Arg	Leu	Tyr	Туr	Gly 200	Glu	Tyr	Tyr	Asn	Ala 205	Pro	Leu	Lys
Arg	Gly 210	Ser	Asp	Tyr	Cys	Ile 215	Ile	Leu	Arg	Ile	Thr 220	Ser	Glu	Trp	Ası
Lys 225	Val	Arg	Arg	His	Ser 230	Cys	Ala	Val	-	Ala 235	Gln	Val	Lys	Asp	Sei 240

Ser Leu Met Leu Gln Met Ala Gly Val Gly Leu Gly Ser Leu Ala

250

Val Val Ile Ile Leu Thr Phe Leu Ser Phe Ser Ala Val 260 265

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Glu	Glu	Glu	Val	Glu 165	Glu	Pro	Glu	Glu	Arg 170	Gln	Gln	Thr	Pro	Glu 175	Val
Val	Pro	Asp	Asp 180	Ser	Gly	Thr	Phe	Tyr 185	Asp	Gln	Ala	Val	Val 190	Ser	Asn
Asp	Met	Glu 195	Glu	His	Leu	Glu	Glu 200	Pro	Val	Ala	Glu	Pro 205	Glu	Pro	Asp
Pro	Glu 210	Pro	Glu	Pro	Glu	Gln 215	Glu	Pro	Val	Ser	Glu 220	Ile	Gln	Glu	Glu
Lys 225	Pro	Glu	Pro	Val	Leu 230	Glu	Glu	Thr	Ala	Pro 235	Glu	Asp	Ala	Gln	Lys 240
Ser	Ser	Ser	Pro	Ala 245	Pro	Ala	Asp	Ile	Ala 250	Gln	Thr	Val	Gln	Glu 255	Asp
Leu	Arg	Thr	Phe 260	Ser	Trp	Ala	Ser	Val 265	Thr	Ser	Lys	Asn	Leu 270	Pro	Pro
Ser	Gly	Ala 275	Val	Pro	Val	Thr	Gly 280	Ile	Pro	Pro	His	Val 285	Val	Lys	Val
Pro	Ala 290	Ser	Gln	Pro	Arg	Pro 295	Glu	Ser	Lys	Pro	Glu 300	Ser	Gln	Ile	Pro
Pro 305	Gln	Arg	Pro	Gln	Arg 310	Asp	Gln	Arg	Val	Arg 315	Glu	Gln	Arg	Ile	Asn 320
Ile	Pro	Pro	Gln	Arg 325	Gly	Pro	Arg	Pro	11e 330	Arg	Glu	Ala	Gly	Glu 335	Gln
Gly	Asp	Ile	Glu 340	Pro	Arg	Arg	Met	Val 345	Arg	His	Pro	Asp	Ser 350	His	Gln
Leu	Phe	11e 355	Gly	Asn	Leu	Pro	His 360	Glu	Val	Asp	Lys	Ser 365	Glu	Leu	Lys
Asp	Phe 370	Phe	Gln	Ser	Tyr	Gly 375	Asn	Val	Val	Glu	Leu 380	Arg	Ile	Asn	Ser
Gly 385	Gly	Lys	Leu	Pro	Asn 390	Phe	Gly	Phe	Val	Val 395	Phe	Asp	Asp	Ser	Glu 400
Pro	Val	Gln	Lys	Val 405	Leu	Ser	Asn	Arg	Pro 410	Ile	Met	Phe	Arg	Gly 415	Glu
Val	Arg	Leu	Asn 420	Val	Glu	Glu	ГÀЗ	Lys	Thr	Arg	Ala	Ala	Arg	Glu	Gly

Asp Arg Arg Asp Asn Arg Leu Arg Gly Pro Gly Gly Pro Arg Gly Gly 440 435 Leu Gly Gly Met Arg Gly Pro Pro Arg Gly Gly Met Val Gln Lys 455 Pro Gly Phe Gly Val Gly Xaa Gly Xaa Ala Pro Arg Gln 470 <210> 978 <211> 339 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (128) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (326) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (336) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (339) <223> Xaa equals any of the naturally occurring L-amino acids <400> 978 Pro Val Ala Ala Val Ser Gly Arg Ala Val Gly Gly Ser Arg Gly Gly Gly Arg Gly Gly Met Ala Ala Ala Ala Gly Ala Gly Ser Gly Pro 25 Trp Ala Ala Gln Glu Lys Gln Phe Pro Pro Ala Leu Leu Ser Phe Phe 35 40 Ile Tyr Asn Pro Arg Phe Gly Pro Arg Glu Gly Gln Glu Asn Lys 50 55

Ile Leu Phe Tyr His Pro Asn Glu Val Glu Lys Asn Glu Lys Ile Arg

65					70					75					80
Asn	Val	Gly	Leu	Cys 85	Glu	Ala	Ile	Val	Gln 90	Phe	Thr	Arg	Thr	Phe 95	Ser
Pro	Ser	Lys	Pro 100	Ala	Lys	Ser	Leu	His 105	Thr	Gln	Lys	Asn	Arg 110	Gln	Phe
Phe	Asn	Glu 115	Pro	Glu	Glu	Asn	Phe 120	Trp	Met	Val	Met	Val 125	Val	Arg	Xaa
Pro	Ile 130	Ile	Glu	Lys	Gln	Ser 135	Lys	Asp	Gly	Lys	Pro 140	Val	Ile	Glu	Tyr
Gln 145	Glu	Glu	Glu	Leu	Leu 150	Asp	Lys	Val	Tyr	Ser 155	Ser	Val	Leu	Arg	Gln 160
Суз	Tyr	Ser	Met	Туг 165	Lys	Leu	Phe	Asn	Gly 170	Thr	Phe	Leu	Lys	Ala 175	Met
Glu	Asp	Gly	Gly 180	Val	Lys	Leu	Leu	Lys 185	Glu	Arg	Leu	Glu	Lys 190	Phe	Phe
His	Arg	Туг 195	Leu	Gln	Thr	Leu	His 200	Leu	Gln	Ser	Суз	Asp 205	Leu	Leu	Asp
Ile	Phe 210	Gly	Gly	·Ile	Ser	Phe 215	Phe	Pro	Leu	Asp	Lys 220	Met	Thr	Tyr	Leu
Lys 225	Ile	Gln	Ser	Phe	11e 230	Asn	Arg	Met	Glu	Glu 235	Ser	Leu	Asn	Ile	Val 240
Lys	Tyr	Thr	Ala	Phe 245	Leu	Tyr	Asn	Asp	Gln 250	Leu	Ile	Trp	Ser	Gly 255	Leu
Glu	Gln		Asp 260	Met	Arg	Ile	Leu	Tyr 265	Lys	Tyr	Leu	Thr	Thr 270	Ser	Leu
Phe	Pro	Arg 275	His	Ile	Glu	Pro	Glu 280	Leu	Ala	Gly	Arg	Asp 285	Ser	Pro	Ile
Arg	Ala 290	Glu	Met	Pro	Gly	Asn 295	Leu _.	Gln	His	Tyr	Gly 300	Arg	Phe	Leu	Thr
Gly 305	Pro	Leu	Asn	Leu	Asn 310	Asp	Pro	Asp	Ala	Lys 315	Cys	Arg	Phe	Pro	Lys 320
Ile	Phe	Val	Asn	Thr 325	Xaa	Asp	Thr	Tyr	Glu 330	Glu	Leu	His	Leu	Ile 335	Xaa

Tyr Lys Xaa

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	Ala	Ala	Gly	Ser 20	Gly	Ala	Gly	Pro	Pro 25	Gly	Pro	Leu	Gln	Gly 30	Arg	Ser
	Gly	Ser	Ser 35	Trp	Ala	Pro	Arg	Pro 40	Gly	Arg	Arg	Thr	Glu 45	Glu	Arg	Arg
	Lys	Gly 50	Ala	Gly	Gly	Thr	Arg 55	Pro	Arg	Pro	Ala	Ala 60	Ala	Met	Asn	Ser
	Asn 65	Val	Glu	Asn	Leu	Pro 70	Pro	His	Ile	Ile	Arg 75	Leu	Val	Tyr	Lys	Glu 80
	Val	Thr	Thr	Leu	Thr 85	Ala	Asp	Pro	Pro	Asp 90	Gly	Ile	Lys	Val	Phe 95	Pro
	Asn	Glu	Glu	Asp 100	Leu	Thr	Asp	Leu	Gln 105	Val	Thr	Ile	Glu	Gly 110	Pro	Glu
	Gly	Thr	Pro 115	Tyr	Ala	Gly	Gly	Leu 120	Phe	Arg	Met	Lys	Leu 125	Leu	Leu	Gly
	Lys	Asp 130	Phe	Pro	Ala	Ser	Pro 135	Pro	Lys	Gly	Tyr	Phe 140	Leu	Thr	Lys	Ile
	Phe 145	His	Pro	Asn	Val	Gly 150	Ala	Asn	Gly	Glu	Ile 155	Суз	Val	Asn	Val	Leu 160
	Lys	Arg	Asp	Trp	Thr 165	Ala	Glu	Leu	Gly	Ile 170	Arg	His	Val	Leu	Leu 175	Thr
	Ile	Lys	Суз	Leu 180	Leu	Ile	His	Pro	Asn 185	Pro	Glu	Ser	Ala	Leu 190	Asn	Glu
	Glu	Ala	Gly 195	Arg	Leu	Leu	Leu	Glu 200	Asn	Tyr	Glu	Glu	Туг 205	Ala	Ala	Arg
	Ala	Arg 210		Leu	Thr	Glu	Ile 215	His	Gly	Gly	Ala	Gly 220	Gly	Pro	Ser	Gly

Arg Ala Glu Ala Gly Arg Ala Leu Ala Ser Gly Thr Glu Ala Ser Ser 225 230 235 Thr Asp Pro Gly Ala Pro Gly Gly Pro Gly Gly Ala Glu Gly Pro Met 245 250 Ala Lys Lys His Ala Gly Glu Arg Asp Lys Lys Leu Ala Ala Lys Lys 265 Lys Thr Asp Lys Lys Arg Ala Leu Arg Arg Leu 275 280 <210> 980 <211> 353 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (333) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (346) <223> Xaa equals any of the naturally occurring L-amino acids <400> 980 Arg Lys Gln Cys Gln Asp Ser Lys Asp Ser Asn His Leu Pro Lys Met Ser Leu Ser Ala Phe Thr Leu Phe Leu Ala Leu Ile Gly Gly Thr Ser 25 Gly Gln Tyr Tyr Asp Tyr Asp Phe Pro Leu Ser Ile Tyr Gly Gln Ser 40 Ser Pro Asn Cys Ala Pro Glu Cys Asn Cys Pro Glu Ser Tyr Pro Ser 50 55 Ala Met Tyr Cys Asp Glu Leu Lys Leu Lys Ser Val Pro Met Val Pro Pro Gly Ile Lys Tyr Leu Tyr Leu Arg Asn Asn Gln Ile Asp His Ile

Asp Glu Lys Ala Phe Glu Asn Val Thr Asp Leu Gln Trp Leu Ile Leu

105

110

Asp	His	Asn 115	Leu	Leu	Glu	Asn	Ser 120	Lys	Ile	Lys	Gly	125	Val	Phe	Ser
Lys	Leu 130	Lys	Gln	Leu	Lys	Lys 135	Leu	His	Ile	Asn	His 140	Asn	Asn	Leu	Thr
Glu 145	Ser	Val	Gly	Pro	Leu 150	Pro	Lys	Ser	Leu	Glu 155	Asp	Leu	Gln	Leu	Thr 160
His	Asn	Lys	Ile	Thr 165	Lys	Leu	Gly	Ser	Phe 170	Glu	Gly	Leu	Val	Asn 175	Leu
Thr	Phe	Ile	His 180	Leu	Gln	His	Asn	Arg 185	Leu	Lys	Glu	Asp	Ala 190	Val	Ser
Ala	Ala	Phe 195	Lys	Gly	Leu	Lys	Ser 200	Leu	Glu	Tyr	Leu	Asp 205	Leu	Ser	Phe
Asn	Gln 210	Ile	Ala	Arg	Leu	Pro 215	Ser	Gly	Leu	Pro	Val 220	Ser	Leu	Leu	Thr
Leu 225	Tyr	Leu	Asp	Asn	Asn 230	Lys	Ile	Ser	Asn	11e 235	Pro	Asp	Glu	Tyr	Phe 240
Lys	Arg	Phe	Asn	Ala 245	Leu	Gln	Tyr	Leu	Arg 250	Leu	Ser	His	Asn	Glu 255	Leu
Ala	Asp	Ser	Gly 260	Ile	Pro	Gly	Asn	Ser 265	Phe	Asn	Val	Ser	Ser 270	Leu	Val
Glu	Leu	Asp 275	Leu	Ser	Tyr	Asn	Lys 280	Leu	Lys	Asn	Ile	Pro 285	Thr	Val	Asn
Glu	Asn 290	Leu	Glu	Asn	Tyr	Tyr 295	Leu	Glu	Val	Asn	Gln 300	Leu	Glu	Lys	Phe
Asp 305	Ile	Lys	Ser	Phe	Cys 310	Lys	Ile	Leu	Gly	Pro 315	Leu	Ser	Tyr	Ser	Lys 320
Ile	Lys	His	Leu ·	Arg 325	Leu	Asp	Gly	Asn	Arg 330	Ile	Ser	Xaa	Thr	Ser 335	Leu
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Asn

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210 215 220 Thr Ile Leu Tyr Phe Pro Phe Ser Ser His Ser Ser Tyr Thr Val Arg 230 235 Ser Lys Lys Ile Phe Leu Ser Lys Leu Ile Val Cys Phe Leu Ser Thr 250 245 Trp Leu Pro Phe Val Leu Leu Gln Val Ile Ile Val Leu Leu Lys Val 265 Gln Ile Pro Ala Tyr Ile Glu Met Asn Ile Pro Trp Leu Tyr Phe Val 280 Asn Ser Phe Leu Ile Ala Thr Val Tyr Trp Phe Asn Cys His Lys Leu Asn Leu Lys Asp Ile Gly Leu Pro Leu Asp Pro Phe Val Asn Trp Lys 310 Cys Cys Phe Ile Pro Leu Thr Ile Pro Asn Leu Glu Gln Ile Glu Lys 325 330 Pro Ile Ser Ile Met Ile Xaa 340 <210> 982 <211> 142 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (108) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (111) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (114) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE

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His Arg Pro Ser Pro Pro Ser Leu Leu Pro Ala Pro Cys Lys Pro Leu
                                 25
Arg Leu Gly Leu Ala Thr Val Pro Ala Gly Ser Pro Gly Leu Gly Val
        35
Gly Asp Ser Leu Gln Ala Arg Ser Pro Glu Thr Ser Glu Gly His Pro
Leu Arg Val Ala Arg Pro Pro Val Ala Asn Leu Ser Ala Ala Ser Ala
                     70
                                         75
Thr Ser Pro Ala Gly Pro Trp Phe Arg Trp Pro Pro Arg Cys Leu Ala
                 85
Glu Thr Arg His Gly Pro Ser Ala Gly Pro His Xaa Phe Pro Xaa Pro
                                105
Gly Xaa Trp His Cys Ser Arg Gln Xaa Xaa Gly His Gln Xaa Xaa Asn
        115
                            120
Arg Thr Gln Xaa Pro Ala Gln Thr Ala Ala Gly Met Gly Ala
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                        135
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                                    10
Gly Ile Glu Lys Gly Ala Ser Asp Glu Asp Ile Lys Lys Ala Tyr Arg
            20
Lys Gln Ala Leu Lys Phe His Pro Asp Lys Asn Lys Ser Pro Gln Ala
Glu Glu Lys Phe Lys Glu Val Ala Glu Ala Tyr Glu Val Leu Ser Asp
Pro Lys Lys Arg Glu Ile Tyr Xaa Gln Phe Gly Glu Glu Gly Leu Lys
Gly Gly Ala Gly Gly Thr Asp Gly Gln Gly Gly Thr Phe Arg Tyr Thr
                                     90
Phe His Gly Asp Pro His Ala Thr Phe Ala Ala Phe Phe Gly Gly Ser
           100
                               105
Asn Pro Phe Glu Ile Phe Phe Gly Arg Arg Met Gly Gly Arg Asp
                        . 120
Ser Glu Glu Met Glu Ile Xaa Gly Asp Pro Xaa Ser Ala Phe Gly Phe
   130
Ser Met Asn Gly Tyr Pro Arg Asp Arg Asn Ser Val Gly Pro Ser Arg
145
                   150
                                        155
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Leu Lys Gln Asp Pro Pro Val Ile His Glu Leu Arg Val Ser Leu Glu
165 170 175

Glu Ile Tyr Ser Gly Cys Thr Lys Arg Asp Glu Arg Phe Leu Glu Lys 180 185 190

Gly

<210> 984

<211> 402

<212> PRT

<213> Homo sapiens

<400> 984

Lys Ser Tyr Glu Met Glu Leu Glu Glu Gly Lys Ala Gly Ser Gly Leu
1 5 10 15

Arg Gln Tyr Tyr Leu Ser Lys Ile Glu Glu Leu Gln Leu Ile Val Asn 20 25 30

Asp Lys Ser Gln Asn Leu Arg Arg Leu Gln Ala Gln Arg Asn Glu Leu $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Asn Ala Lys Val Arg Leu Leu Arg Glu Glu Leu Gln Leu Gln Glu 50 55 60

Gln Gly Ser Tyr Val Gly Glu Val Val Arg Ala Met Asp Lys Lys 65 70 75 80

Val Leu Val Lys Val His Pro Glu Gly Lys Phe Val Val Asp Val Asp 85 90 95

Lys Asn Ile Asp Ile Asn Asp Val Thr Pro Asn Cys Arg Val Ala Leu 100 105 110

Arg Asn Asp Ser Tyr Thr Leu His Lys Ile Leu Pro Asn Lys Val Asp 115 120 125

Pro Leu Val Ser Leu Met Met Val Glu Lys Val Pro Asp Ser Thr Tyr 130 135 140

Glu Met Ile Gly Gly Leu Asp Lys Gln Ile Lys Glu Ile Lys Glu Val 145 150 155 160

Ile Glu Leu Pro Val Lys His Pro Glu Leu Phe Glu Ala Leu Gly Ile 165 170 175

Ald	GIN	PIO	180	GIÀ	vai	reu	Leu	185	GTÀ	PIO	PIO	GLY	190	GIĄ	rys
Thr	Leu	Leu 195	Ala	Arg	Ala	Val	Ala 200	His	His	Thr	Asp	Cys 205	Thr	Phe	Ile
Arg	Val 210	Ser	Gly	Ser	Glu	Leu 215	Val	Gln	Lys	Phe	Ile 220	Gly	Glu	Gly	Ala
Arg 225	Met	Val	Arg	Glu	Leu 230	Phe	Val	Met	Ala	Arg 235	Glu	His	Ala	Pro	Ser 240
Ile	Ile	Phe	Met	Asp 245	Glu	Ile	Asp	Ser	Ile 250	Gly	Ser	Ser	Arg	Leu 255	Glu
Gly	Gly	Ser	Gly 260	Gly	Asp	Ser	Glu	Val 265	Gln	Arg	Thr	Met	Leu 270	Glu	Leu
Leu	Asn	Gln 275	Leu	Asp	Gly	Phe	Glu 280	Ala	Thr	Lys	Asn	Ile 285	Lys	Val	Ile
Met	Ala 290	Thr	Asn	Arg	Ile	Asp 295	Ile	Leu	Asp	Ser	Ala 300	Leu	Leu	Arg	Pro
Gly 305	Arg	Ile	Asp	Arg	Lys 310	Ile	Glu	Phe	Pro	Pro 315	Pro	Asn	Glu	Glu	Ala 320
Arg	Leu	Asp	Ile	Leu 325	Lys	Ile	His	Ser	Arg 330	Lys	Met	Asn	Leu	Thr 335	Arg
Gly	Ile	Asn	Leu 340	Arg	Lys	Ile	Ala	Glu 345	Leu	Met	Pro	Gly	Ala 350	Ser	Gly
Ala	Glu	Val 355	Lys	Gly	Val	Cys	Thr 360	Glu	Ala	Gly	Met	Туг 365	Ala	Leu	Arg
Glu	Arg 370	Arg	Val	His	Val	Thr 375	Gln	Glu	Asp	Phe	Glu 380	Met	Ala	Val	Ala
Lys	Val	Met	Gln	-	Asp		Glu	Lys		Met	Ser	Ile	Lys	Lys	Leu

Trp Lys

<210> 985

<211> 347

<212> PRT

<213> Homo sapiens

<400> 985

Arg 1	Arg	Arg	Arg	Trp 5	His	Pro	Gly	Pro	Gly 10	Gly	Pro	Arg	Arg	Thr 15	Ala
Gly	Lys	Gly	Pro 20	Arg	Lys	Val	Ala	Ser 25	Ala	Ser	Ala	Ala	Ala 30	Ser	Thr
Leu	Ser	Glu 35	Pro	Pro	Arg	Arg	Thr 40	Gln	Glu	Ser	Arg	Thr 45	Arg	Thr	Arg
Ala	Leu 50	Gly	Leu	Pro	Thr	Leu 55	Pro	Met	Glu	Lys	Leu 60	Ala	Ala	Ser	Thr
Glu 65	Pro	Gln	Gly	Pro	Arg 70	Pro	Val	Leu	Gly	Arg 75	Glu	Ser	Val	Gln	Val 80
Pro	Asp	Asp	Gln	Asp 85	Phe	Arg	Ser	Phe	Arg 90	Ser	Glu	Cys	Glu	Ala 95	Glu
Val	Gly	Trp	Asn 100	Leu	Thr	Tyr	Ser	Arg 105	Ala	Gly	Val	Ser	Val 110	Trp	Val
Gln	Ala	Val 115	Glu	Met	Asp	Arg	Thr 120	Leu	His	Lys	Ile	Lys 125	Суѕ	Arg	Met
Glu	Cys 130	Cys	Asp	Val	Pro	Ala 135	Glu	Thr	Leu	Tyr	Asp 140	Val	Leu	His	Asp
Ile 145	Glu	Tyr	Arg	Lys	Lys 150	Trp	Asp	Ser	Asn	val 155	Ile	Glu	Thr	Phe	Asp 160
Ile	Ala	Arg	Leu	Thr 165	Val	Asn	Ala	Asp	val 170	Gly	Tyr	Tyr	Ser	Trp 175	Arg
Cys	Pro	Lys	Pro 180	Leu	Lys	Asn	Arg	Asp 185	Val	Ile	Thr	Leu	Arg 190	Ser	Trp
Leu	Pro	Met 195	Gly	Ala	Asp	Tyr	Ile 200	Ile	Met	Asn	Tyr	Ser 205	Val	Lys	His
Pro	Lys 210	Tyr	Pro	Pro	Arg	Lys 215	Asp	Leu	Val	Arg	Ala 220	Val	Ser	Ile	Gln
Thr 225	Gly	Tyr	Leu	Ile	Gln 230	Ser	Thr	Gly	Pro	Lys 235	Ser	Суз	Val	Ile	Thr 240
lyr	Leu	Ala	Gln	Val 245	Asp	Pro	Lys	Gly	Ser 250	Leu	Pro	Lys	Trp	Val 255	Val
Asn	T.ve	Ser	Ser	Gln	Phe	T.em	A1 =	Pro	T.VC	Δla	Mot	T.vq	Lve	Met	ጥኒኒፖ

265 270 260 Lys Ala Cys Leu Lys Tyr Pro Glu Trp Lys Gln Lys His Leu Pro His 280 Phe Lys Pro Trp Leu His Pro Glu Gln Ser Pro Leu Pro Ser Leu Ala 290 295 300 Leu Ser Glu Leu Ser Val Gln His Ala Asp Ser Leu Glu Asn Ile Asp 310 Glu Ser Ala Val Ala Glu Ser Arg Glu Glu Arg Met Gly Gly Ala Gly 330 Gly Glu Gly Ser Asp Asp Asp Thr Ser Leu Thr 340 <210> 986 <211> 106 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (36) <223> Xaa equals any of the naturally occurring L-amino acids <400> 986 Ala Ser Ile Cys Ala Asp Ala Lys Leu Trp Thr Met Tyr Ala Arg Pro Ser Asn Arg Gln Arg Cys Leu Gly Ser Lys His Thr Glu Arg Thr Trp 20 Thr Ala Trp Xaa Arg Ser Leu Ile Arg Pro Phe Ser Met His Ile Leu Pro Lys Gln Ser Gln Ile Pro Leu Lys Gly Ala Asp Ser Ile Ser Ser 55 Ser Val Gln Thr Leu Arg Ala Glu Arg Ser Gly Ser Gly Ser His Val 65 70 Thr Ala Gln Asn Asn Leu Arg Asn Pro Leu Cys Pro Glu Gly Ser Leu

105

Thr Ser Pro Ser Gly Ser Glu Gln Ser Leu

<21 <21	0> 91 1> 1' 2> P1 3> Ho	72 RT	sapie	ens											
<40	0> 98	37													
Thr 1	Pro	Arg	Gly	Ala 5	Val	Lys	Pro	Ser	Ala 10	Asn	Lys	Tyr	Pro	Ile 15	Phe
Phe	Phe	Gly	Thr 20	His	Glu	Thr	Ala	Phe 25	Leu	Gly	Pro	Lys	Asp 30	Leu	Phe
Pro	туг	Lys 35	Glu	Tyr	Lys	Asp	Lys 40	Phe	Gly	Lys	Ser	Asn 45	Lys	Arg	Lys
Gly	Phe 50	Asn	Glu	Gly	Leu	Trp 55	Glu	Ile	Glu	Asn	Asn 60		Gly	Val	ГÀЗ
Phe 65	Thr	Gly	Tyr	Gln	Ala 70	Ile	Gln	Gln	Gln	Ser 75	Ser	Ser	Glu	Thr	Glu 80
Gly	Glu	Gly	Gly	Asn 85	Thr	Ala	Asp	Ala	Ser 90	Ser	Glu	Glu	Glu	Gly 95	Asp
Arg	Val	Glu	Glu 100	Asp	Gly	Lys	Gly	Lys 105	Arg	Lys	Asn	Glu	Lys 110	Ala	Gly
Ser	Lys	Arg 115	Lys	Lys	Ser	Tyr	Thr 120	Ser	Lys	Lys	Ser	Ser 125	Lys	Gln	Ser
Arg	Lys 130	Ser	Pro	Gly	Asp	Glu 135	Asp	Asp	Lys	Asp	Cys 140	Lys	Glu	Glu	Glu
Asn	Lys	Ser	Ser	Ser	Glu	Gly	Gly	Asp	Ala	Gly	Asn	Asp	Thr	Arg	Asn

170

<210> 988

145

<211> 238 ·

. <212> PRT

<213> Homo sapiens

150

165

Thr Thr Ser Asp Leu Gln Lys Thr Ser Glu Gly Thr

<220>

<221> SITE

<222> (101)

<223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (146) <223> Xaa equals any of the naturally occurring L-amino acids <400> 988 Ala Lys Gln Asp Pro Val Pro Glu Gln Glu Met Ser Pro Ser Ile Ser Asp Pro Cys Leu Gly Gln Ala Leu Met Gly Gly Pro Ser Phe Lys Ala Val Val Gly Thr Ala Pro Pro Asn Ala Ser Leu Ser Phe Leu Pro Ile 35 40 His Gln Tyr Thr Ala Gly Pro Phe Leu Val Phe Val Gln Gln Glu Thr 55 His Phe Trp Trp Asp Met Pro Ser Ser Ala Thr Gly Pro Leu Thr Pro 65 70 75 Cys Ile Ser Val Leu Pro Val Ser Ala Gly Thr Asp Ser Lys Gly Lys Pro Ser Val Trp Xaa Ile Gly Gly Trp Glu Gln Arg Gly Glu Asn Ala Val Leu Ser Phe Cys Leu Gly Ile Pro His Thr Trp Val Leu Pro 115 120 Gly Lys Pro Val Leu Ser Lys Thr Met Asp Leu Ala Ser Pro Thr Gly 135 Leu Xaa Ser Gln His Leu Arg Glu Gly Gly Trp Lys Arg Leu Cys Pro 145 150 155 His Phe Glu Leu Gln Ala Gly Ser Ala Ala Leu Lys Pro Ser Ser Asp Phe Leu Thr Gln Asp Pro Ala Pro Gly Arg Arg Arg Val Gly Ala Gly 185 Leu Val Gly Gln Lys Glu Ala Ser Ala Gly Leu Glu Asp Pro Ser Ser 195 . 200 205 Thr Ser His Ser Val Ser Ser Ser Trp Glu Asn Leu Cys Gln Ala Arg 215

Ala Val Ile Gly Pro His Glu Val Ser Glu Ala Pro Ser Trp

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956

225 230 235

<210> 989

<211> 74

<212> PRT

<213> Homo sapiens

<400> 989

Ser Leu Ile Lys Ala Leu Tyr Ile Leu Tyr Gly Phe Arg His His His 1 5 10 15

Thr Lys Lys Leu Thr Pro Ser Ile Pro Val Phe Val Gly Gln Ala Ser 20 25 30

Phe Phe Ser Pro Cys Ser Val Ser His Thr Val Cys Leu Gln Lys Leu 35 40 45

Leu Ile Gly Ala Lys Tyr Asn Cys Gln Tyr Asn Leu Lys Thr Thr Met 50 55 60

Cys Pro Arg Arg Pro Thr Cys Leu Phe Pro 65

<210> 990

<211> 295

<212> PRT

<213> Homo sapiens

<400> 990

Ala Pro Ala Arg Pro Gly Ser Leu Pro Ser Thr Arg Ser Ala Pro Leu 1 5 10 15

Val Pro Ser Ser Arg Arg Pro Ala Glu Ser Pro Leu Arg Ser Arg

Arg Cys Arg Gly Asp Met Val Leu Cys Val Gln Gly Pro Arg Pro Leu 35

Leu Ala Val Glu Arg Thr Gly Gln Arg Pro Leu Trp Ala Pro Ser Leu 50 60

Glu Leu Pro Lys Pro Val Met Gln Pro Leu Pro Ala Gly Ala Phe Leu 65 70 75 80

Glu Glu Val Ala Glu Gly Thr Pro Ala Gln Thr Glu Ser Glu Pro Lys $85 \hspace{1cm} 90 \hspace{1cm} 95$

Val	Leu	Asp	Pro 100	Glu	Glu	Asp	Leu	Leu 105	Cys	Ile	Ala	Lys	Thr 110	Phe	Ser
Tyr	Leu	Arg 115	Glu	Ser	Gly	Trp	Tyr 120	Trp	Gly	Ser	Ile	Thr 125	Ala	Ser	Glu
Ala	Arg 130	Gln	His	Leu	Gln	Lys 135	Met	Pro	Glu	Gly	Thr 140	Phe	Leu	Val	Arg
Asp 145	Ser	Thr	His	Pro	Ser 150	туг	Leu	Phe	Thr	Leu 155	Ser	Val	Lys	Thr	Thr 160
Arg	Gly	Pro	Thr	Asn 165	Val	Arg	Ile	Glu	туr 170	Ala	Asp	Ser	Ser	Phe 175	Arg
Leu	Asp	Ser	Asn 180	Cys	Leu	Ser	Arg	Pro 185	Arg	Ile	Leu	Ala	Phe 190	Pro	Asp
Val	Val	Ser 195	Leu	Val	Gln	His	Туг 200	Val	Ala	Ser	Cys	Thr 205	Ala	Asp	Thr
Arg	Ser 210	Asp	Ser	Pro	Asp	Pro 215	Ala	Pro	Thr	Pro	Ala 220	Leu	Pro	Met	Pro
Lys 225	Glu	Asp	Ala	Pro	Ser 230	Asp	Pro	Ala	Leu	Pro 235	Ala	Pro	Pro	Pro	Ala 240
Thr	Ala	Val	His	Leu 245	Lys	Leu	Val	Gln	Pro 250	Phe	Val	Arg	Arg	Ser 255	Ser

Ala Arg Ser Leu Gln His Leu Cys Arg Leu Val Ile Asn Arg Leu Val

Ala Asp Val Asp Cys Leu Pro Leu Pro Arg Arg Met Ala Asp Tyr Leu

280

265

285

Arg Gln Tyr Pro Phe Gln Leu 290 295

275

260

<210> 991

<211> 58

<212> PRT

<213> Homo sapiens

<400> 991

Leu His Lys Val Ser Ile Leu Leu Tyr Ser Ala Val Leu Val Ser Phe 1 5 10 15

Ser Cys Ile Gly Phe His Cys Ile Tyr Ser Leu Phe Met Leu Asn Leu

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958

25 20 Ala Lys Asp Glu His Cys Pro Pro Leu Lys Cys Leu Cys His Phe Glu 40 Phe Cys Ala Asn Phe Val Ala Arg Met Arg 50 <210> 992 <211> 203 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (8) <223> Xaa equals any of the naturally occurring L-amino acids Ala His Ala Ser Pro Thr Arg Xaa Glu Ala Arg Val Val Val Arg Cys Leu Pro Ala Cys Val Arg Asp Leu Pro Asp Ser Val Ala Ala Met 25 Ala Ser Asp Glu Gly Lys Leu Phe Val Gly Gly Leu Ser Phe Asp Thr Asn Glu Gln Ser Leu Glu Gln Val Phe Ser Lys Tyr Gly Gln Ile Ser Glu Val Val Val Lys Asp Arg Glu Thr Gln Arg Ser Arg Gly Phe 75 70 Gly Phe Val Thr Phe Glu Asn Ile Asp Asp Ala Lys Asp Ala Met Met 85 Ala Met Asn Gly Lys Ser Val Asp Gly Arg Gln Ile Arg Val Asp Gln 105 100 Ala Gly Lys Ser Ser Asp Asn Arg Ser Arg Gly Tyr Arg Gly Gly Ser 115 Ala Gly Gly Arg Gly Phe Phe Arg Gly Gly Arg Gly Arg Gly Arg Gly

135

Phe Ser Arg Gly Gly Gly Asp Arg Gly Tyr Gly Gly Asn Arg Phe Glu

Ser Arg Ser Gly Gly Tyr Gly Gly Ser Arg Asp Tyr Tyr Ser Ser Arg 165 170 175

Ser Gln Ser Gly Gly Tyr Ser Asp Arg Ser Ser Gly Gly Ser Tyr Arg 180 185 190

Asp Ser Tyr Asp Ser Tyr Ala Thr His Asn Glu 195 200

<210> 993

<211> 252

<212> PRT

<213> Homo sapiens

<400> 993

Gly Gly Leu Ala Trp Arg Ala Leu Arg Thr Ser Gly Thr Leu Leu Arg 1 5 10 15

Val Glu Arg Leu Leu Glu Asp Tyr Cys Pro Glu Glu Lys Met Phe 20 25 30

Gly Phe His Lys Pro Lys Met Tyr Arg Ser Ile Glu Gly Cys Cys Ile 35 40 45

Cys Arg Ala Lys Ser Ser Ser Ser Arg Phe Thr Asp Ser Lys Arg Tyr 50 55 60

Glu Lys Asp Phe Gln Ser Cys Phe Gly Leu His Glu Thr Arg Ser Gly 65 70 75 80

Asp Ile Cys Asn Ala Cys Val Leu Leu Val Lys Arg Trp Lys Lys Leu 85 90 95

Pro Ala Gly Ser Lys Lys Asn Trp Asn His Val Val Asp Ala Arg Ala 100 105 110

Gly Pro Ser Leu Lys Thr Thr Leu Lys Pro Lys Lys Val Lys Thr Leu 115 120 125

Ser Gly Asn Arg Ile Lys Ser Asn Gln Ile Ser Lys Leu Gln Lys Glu 130 135 140

Phe Lys Arg His Asn Ser Asp Ala His Ser Thr Thr Ser Ser Ala Ser 145 150 155 160

Pro Ala Gln Ser Pro Cys Tyr Ser Asn Gln Ser Asp Asp Gly Ser Asp 165 170 175

Thr Glu Met Ala Ser Gly Ser Asn Arg Thr Pro Val Phe Ser Phe Leu

960

190

185

Asp Leu Thr Tyr Trp Lys Arg Gln Lys Ile Cys Cys Gly Ile Ile Tyr 200 Lys Gly Arg Phe Gly Glu Val Leu Ile Asp Thr His Leu Phe Lys Pro 210 215 Cys Cys Ser Asn Lys Lys Ala Ala Glu Lys Pro Glu Glu Gln Gly 235 230 Gln Ser Leu Cys Pro Ser Pro Leu Arg Ser Gly Asp 245 250 <210> 994 <211> 170 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (5) <223> Xaa equals any of the naturally occurring L-amino acids Arg Thr Arg Gly Xaa Asp Thr Gln Pro Thr Val Cys Thr Asp Ala Pro Ser Leu Leu Pro Leu Ser Arg Leu His Leu Arg Gly Ser Trp Asp Arg - 25 Arg Ser Val Ala Asn Met Gln Leu Phe Val Arg Ala Gln Glu Leu His 35 40 Thr Phe Glu Val Thr Gly Gln Glu Thr Val Ala Gln Ile Lys Ala His Val Ala Ser Leu Glu Gly Ile Ala Pro Glu Asp Gln Val Val Leu Leu . 75 70 Ala Gly Ala Pro Leu Glu Asp Glu Ala Thr Leu Gly Gln Cys Gly Val 85 Glu Ala Leu Thr Thr Leu Glu Val Ala Gly Arg Met Leu Gly Gly Lys 105 Val His Gly Ser Leu Ala Arg Ala Gly Lys Val Arg Gly Gln Thr Pro 120 115

Lys Val Ala Lys Gln Glu Lys Lys Lys Lys Lys Thr Gly Arg Ala Lys 130 135 140

Arg Arg Met Gln Tyr Asn Arg Arg Phe Val Asn Val Val Pro Thr Phe 145 150 155 160

Gly Lys Lys Lys Gly Pro Asn Ala Asn Ser 165 170

<210> 995

<211> 156

<212> PRT

<213> Homo sapiens

<400> 995

Gly Ser Gly Thr His Pro Ala Arg Ala Ala Pro Ala Pro His Ala Arg

1 5 10 15

Ala Ser Phe Ser Arg Pro Leu Ala Pro Arg Arg Ser His Leu Ser Ser 20 25 30

Leu Ala His Ala Arg Pro Ala Arg Glu Pro Arg Arg Leu Gly Pro 35 40 45

Ala Glu Ala Pro Pro Arg His Val Phe Ala Ser Arg Arg Lys Leu Glu 50 60

Thr Lys Ala Gly His Pro Pro Ala Val Lys Ala Gly Gly Met Arg Ile 65 70 75 80

Val Gln Lys His Pro His Thr Gly Asp Thr Lys Glu Glu Lys Asp Lys 85 90 95

Asp Asp Gln Glu Trp Glu Ser Pro Ser Pro Pro Lys Pro Thr Val Phe
100 105 110

Ile Ser Gly Val Ile Ala Arg Gly Asp Lys Asp Phe Pro Pro Ala Ala 115 120 125

Ala Gln Val Ala His Gln Lys Pro His Ala Ser Met Asp Lys His Pro 130 135 140

Ser Pro Arg Thr Gln His Ile Gln Gln Pro Arg Lys 145 150 155

<210> 996

<211> 217

	2> P1 3> Ho		sapie	ens											
<222	l> si 2> (2	27)	quals	s any	, of	the	nati	ırall	Ly o	ccuri	ring	L-ar	nino	acio	is
)> 99 Ser		Glu	Gln 5	Glu	Gly	Ser	Gln	Trp	Ser	Leu	Pro	Val	Leu 15	His
Ser	Val	Pro	Asp 20	Pro	Ala	Cys	Leu	Thr 25	Leu	Xaa	Arg	Val	Ser 30	Lys	Gly
Leu	Ala	Ala 35	Val	Arg	Ser	Ser	Val 40	Pro	Arg	Ala	Gly	Gly 45	Val	Ser	Arg
Arg	Leu 50	Ala	Ala	Val	Arg	Ser 55	Thr	Val	Leu	Суѕ	Arg 60	Ala	Val	Gly	Суз
Ile 65	Leu	Ala	Glu	Leu	Leu 70	Ala	His	Arg	Pro	Leu 75	Leu	Pro	Gly	Thr	Ser 80
Glu	Ile	His	Gln	Ile 85	Asp	Leu	Ile	Val	Gln 90	Leu	Leu	Gly	Thr	Pro 95	Ser
Glu	Asn	Ile	Trp 100	Pro	Gly	Phe	Ser	Lys 105	Leu	Pro	Leu	Val	Gly 110	Gln	Tyr
Ser	Leu	Arg 115	Lys	Gln	Pro	Туr	Asn 120	Asn	Leu	Lys	His	Lys 125	Phe	Pro	Trp
Leu	Ser 130	Glu	Ala	Gly	Leu	Arg 135	Суз	Cys	Thr	Ser	Cys 140	Ser	Суз	Thr	Thr
Leu 145	Arg	Lys	Gly	Arg	Arg 150	Pro	Gly	Thr	Ala	Trp 155	Arg	Ala	Pro	Ile	Ser 160
Arg	Arg	Ser	Pro	Туг 165	Pro	Val	Ser	Arg	Ser 170	Ser	Суз	Arg	Pro	Phe 175	Pro
Thr	Thr	Ala	Thr 180	Ser	Gly	Pro	Pro	Gln 185	Pro	Pro	Pro	Arg	Ala 190	Arg	Ala
Ser	Ala	Val 195	Asn	Pro	Asp	Gly	Gly 200	Pro	Gly	Thr	Arg	Leu 205	Tyr	Ser	His
Thr	Arg 210	Ser	Ser	Asp	Gln	Trp 215	Cys	Leu							

<210> 997

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<212	2> PF	٦٢													
	_														
<213	3> Ho	omo s	sapıe	ens											
-400)> 99	17													
Val	Ser	Pro	Arg	Ala	Gly	Gly	Ala	Gly	Asn	Asn	Arg	Gly	Arg	Ala	His
1			_	_	_				10					15	
1				5					10					13	
	Ala	C	~		C	T	D-0	21-	D=0	D~0	21-	@b.∽	TON	n.c.n	Dro
Arg	ALA	ser	Ser	cys	Ser	rea	PIU	MIG	PLU	PLU	ALG	1111		vab	FIO
			20					25					30		
Arg	Ile	Pro	Pro	Ala	Arg	Leu	Pro	Ala	Met	Ala	Asp	Lys	Glu	Ala	Ala
_		35			_		40					45			
		33					40					73			
Dho	Asp	non	λ Ι =	W-1	Glu.	Glu.	Ara	17 a 1	T1a	Aen	Glu	Glu	ጥህዮ	T.vc	Tlo
FIIE	ASP	ASP	ALG	Val	GIU	GIU	AL 9	Val	116	no		OT4	-1-	27.5	110
	50					55					60				
Trp	Lys	Lys	Asn	Thr	Pro	Phe	Leu	Tyr	Asp	Leu	Val	Met	Thr	His	Ala
	•	-						_	_	75					- 80
65					70					13					- 60
T	Glu	m	D	c	T	mb	77-	C1 =	m	T 011	Dro	Acn	1751	mh.~	7~~
Leu	GIU	Trp	PTO	ser	ren	THE	Ald	GIII	тър	Leu	PLO	ASP	vai	1111	ALG
				85					90					95	
Pro	Glu	Gly	Lys	Asp	Phe	Ser	Ile	His	Arg	Leu	Val	Leu	Gly	Thr	His
		•	-	•				105	-				110		
			100					103					110		
m 1	Ser		~1	~1-		***	T	*** 1	710	21-	C ~ ~	*** 7	C1-	T 011	Dwa
Thr	ser	Asp	GIU	GIU	Asn	HIS	Leu	Val	TIE	нта	ser	Vai	GIII	Leu	PIO
		115					120					125			
											•				
Asn	Asp	Asp	Ala	Gln	Phe	Asp	Ala	Ser	His	Tyr	Asp	Ser	Glu	Lys	Gly
	-	6								-				-	-
	130					135					140				
~ 3	- L	~ 3		D L -	G3		**- 1	C	C1	T	T1-	C1	Tla	C1	T1-
GIU	Phe	GIA	GTA	Pne	GLY	ser	Val	Ser	GIA	гÃг	TTE	GIU	TIE	GIU	TTG
145					150					155					160
Lvs	Ile	Asn	His	Glu	Glv	Glu	Val	Asn	Arq	Ala	Arg	Tyr	Met	Pro	Gln
-1-					2						-	-			
				165					170					175	
			_		_		_		_	_	_	_	•	_	
Asn	Pro	Cys	Ile	Ile	Ala	Thr	Lys	Thr	Pro	ser	ser	Asp	val	Leu	Val
			180					185					190		
			100					103							
Dh-	Asp	m	mb	T	u:-	Dro	Ser	T.376	Dro	Aer	Dro	Ser	Glv	Gliv	Cve
Pile	Asp	TYL	THE	Lys	urz	PIO	Ser	ыyэ	FIO	vab	FIU		GLY	GIU	Cys
		195					200					205			
Asn	Pro	Asp	Leu	Ara	Leu	Arg	Gly	His	Gln	Lys	Glu	Gly	Tyr	Gly	Leu
				9			-			_		-	•	- 4	
	210					215					220				
0			_	•	T	C	C1	u: -	T	T c···	60-	A 1 ~	ec-	N	n
ser	Trp	Asn	Pro	ASN	ьeu	ser	GTÅ	uta	ren	red	oet.	wrg	Ser	мsр	ASD

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964

225					230					235					240
His	Thr	Ile	Сув	Leu 245	Trp	Asp	Ile	Ser	Ala 250	Val	Pro	Lys	Glu	Gly 255	Lys
Val	Val	Asp	Ala 260	Lys	Thr	Ile	Phe	Thr 265	Gly	His	Thr	Ala	Val 270	Val	Glu
Asp	Val	Ser 275	Trp	His	Leu	Leu	His 280	Glu	Ser	Leu	Phe	Gly 285	Ser	Val	Ala
Asp	Asp 290	Gln	Lys	Leu	Met	Ile 295	Trp	Asp	Thr	Arg	ser 300	Asn	Asn	Thr	Ser
Lys 305	Pro	Ser	His	Ser	Val 310	Asp	Ala	His	Thr	Ala 315	Glu	Val	Asn	Суз	Leu 320
Ser	Phe	Asn	Pro	Туг 325	Ser	Glu	Phe	Ile	Leu 330	Ala	Thr	Gly	Ser	Ala 335	Asp
Lys	Thr	Val	Ala 340	Leu	Trp	Asp	Leu	Arg 345	Asn	Leu	Lys	Leu	Lys 350	Leu	His
Ser	Phe	Glu 355	Ser	His	Lys	Asp	Glu 360	Ile	Phe	Gln	Val	Gln 365	Trp	Ser	Pro
His	Asn 370	Glu	Thr	Ile	Leu	Ala 375	Ser	Ser	Gly	Thr	Asp 380	Arg	Arg	Leu	Asn
Val 385	Trp	Asp	Leu	Ser	Lys 390	Ile	Gly	Glu	Glu	Gln 395	Ser	Pro	Glu	Asp	Ala 400
Glu	Asp	Gly	Pro	Pro 405	Glu	Leu	Leu	Phe	Ile 410	His	Gly	Gly	His	Thr 415	Ala
Lys	Ile	Ser	Asp 420	Phe	Ser	Trp	Asn	Pro 425	Asn	Glu	Pro	Trp	Val 430	Ile	Суз
Ser	Val	Ser 435	Glu	Asp	Asn	Ile	Met 440	Gln	Val	Trp	Gln	Met 445	Ala	Glu	Asn
Ile	Tyr 450	Asn	Asp	Glu	Asp	Pro 455	Glu	Gly	Ser	Val	Asp 460	Pro	Glu	Gly	Gln
Gly 465	Ser														

<210> 998 <211> 165

<212> PRT <213> Homo sapiens <400> 998 Thr Arg Pro Pro Thr Arg Arg Pro Thr Arg Pro Pro Lys Ala Lys Lys Glu Ala Pro Ala Pro Pro Lys Ala Glu Ala Lys Ala Lys Ala Leu Lys Ala Lys Lys Ala Val Leu Lys Gly Val His Ser His Lys Lys Lys Lys Ile Arg Thr Ser Pro Thr Phe Arg Arg Pro Lys Thr Leu Arg Leu Arg Arg Gln Pro Lys Tyr Pro Arg Lys Ser Ala Pro Arg Arg Asn Lys Leu 70 Asp His Tyr Ala Ile Ile Lys Phe Pro Leu Thr Thr Glu Ser Ala Met Lys Lys Ile Glu Asp Asn Asn Thr Leu Val Phe Ile Val Asp Val Lys 105 Ala Asn Lys His Gln Ile Lys Gln Ala Val Lys Lys Leu Tyr Asp Ile Asp Val Ala Lys Val Asn Thr Leu Ile Arg Pro Asp Gly Glu Lys Lys 135 Ala Tyr Val Arg Leu Ala Pro Asp Tyr Asp Ala Leu Asp Val Ala Asn 145 150

Lys Ile Gly Ile Ile 165

<210> 999

<211> 194

<212> PRT

<213> Homo sapiens

<400> 999

Pro Glu Asn Ser Thr Ser Ser Phe Leu Leu Trp Gly Cys Pro Pro Ser

Val Val Cys Phe Thr Val Gly Ser Pro Ala Arg Arg Pro Gln Cys Phe

Leu Arg Ala Glu Met Ala Asn Ser Gly Leu Gln Leu Leu Gly Phe Ser Met Ala Leu Leu Gly Trp Val Gly Leu Val Ala Cys Thr Ala Ile Pro 55 50 Gln Trp Gln Met Ser Ser Tyr Ala Gly Asp Asn Ile Ile Thr Ala Gln Ala Met Tyr Lys Gly Leu Trp Met Asp Cys Val Thr Gln Ser Thr Gly 85 90 Met Met Ser Cys Lys Met Tyr Asp Ser Val Leu Ala Leu Ser Ala Ala 100 105 110 Leu Gln Ala Thr Arg Ala Leu Met Val Val Ser Leu Val Leu Gly Phe 120 Leu Ala Met Phe Val Ala Thr Met Gly Met Lys Cys Thr Arg Cys Gly 135 140 130 Gly Asp Asp Lys Val Lys Lys Ala Arg Ile Ala Met Gly Gly Ile 150

165 170 175

Ile Phe Ile Val Ala Gly Leu Ala Ala Leu Val Ala Cys Ser Trp Tyr

Gly His Gln Ile Val Thr Asp Phe Tyr Asn Pro Leu Ile Pro Thr Asn 180 185 190

Ile Lys

<210> 1000 <211> 362 <212> PRT

<213> Homo sapiens

<221> SITE

<220>

<222> (25)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1000

Arg Gln Gln Arg Thr Arg Lys Lys Pro Ala Gly Ala Ala Leu Gly
1 5 10 15

Ala Leu Gly Pro Arg Ala Gln Leu Xaa Ala Ala Ala Gln Thr Asn Ser 20 25 30

Asn	Ala	Ala 35	Gly	Lys	Gln	Leu	Arg 40	Lys	Glu	Ser	Gln	Lys 45	Asp	Arg	Ly
Asn	Pro 50	Leu	Pro	Pro	Ser	Val 55	Gly	Val	Val	Asp	Lys 60	Lys	Glu	Glu	Th
Gln 65	Pro	Pro	Val	Ala	Leu 70	Lys	Lys	Glu	Gly	Ile 75	Arg	Arg	Val	Gly	Arq 80
Arg	Pro	Asp	Gln	Gln 85	Leu	Gln	Gly	Glu	Gly 90	Lys	Ile	Ile	Asp	Arg 95	Arg
Pro	Glu	Arg	Arg 100	Pro	Pro	Arg	Glu	Arg 105	Arg	Phe	Glu	Lys	Pro 110	Leu	Glu
Glu	Lys	Gly 115	Glu	Gly	Gly	Glu	Phe 120	Ser	Val	Asp	Arg	Pro 125	Ile	Ile	Asp
Arg	Pro 130	Ile	Arg	Gly	Arg	Gly 135	Gly	Leu	Gly	Arg	Gly 140	Arg	Gly	Gly	Arg
Gly 145	Arg	Gly	Met	Gly	Arg 150	Gly	Asp	Gly	Phe	Asp 155	Ser	Arg	Gly	Lys	Arg 160
Glu	Phe	Asp	Arg	His 165	Ser	Gly	Ser	Asp	Arg 170	Ser	Ser	Phe	Ser	His 175	Туг
	_		180			_	-	185				_	Ser 190		
	_	195			_		200				_	205	Ser		
Thr	Glu 210	Glu	Thr	Pro	Glu	Gly 215	Glu	Glu	His	His	Pro 220	Val	Ala	Asp	Thr
225					230					235			Gly		240
				245					250			_	Asp	255	
			260					265					Asp 270		
		275		,	•		280			·		285	Glu		
Ala	Glu 290	Asp	Ser	Val	Met	Asp 295	His	His	Phe	Arg	Lys 300	Pro	Ala	Asn	Asp

968

Ile Thr Ser Gln Leu Glu Ile Asn Phe Gly Asp Leu Gly Arg Pro Gly

310

Arg Gly Gly Arg Gly Gly Arg Gly Arg Gly Arg Gly Arg Pro 325 330 Asn Arg Gly Ser Arg Thr Asp Lys Ser Ser Ala Ser Ala Pro Asp Val 345 Asp Asp Pro Glu Ala Phe Pro Ala Leu Ala 355 360 <210> 1001 <211> 207 <212> PRT <213> Homo sapiens <400> 1001 Leu Met Ser Val Val Arg Gly Phe Ser Glu Ala Ala Ala Gln Tyr Asn Pro Glu Pro Pro Pro Pro Arg Thr His Tyr Ser Asn Ile Glu Ala Asn 25 Glu Ser Glu Glu Val Arg Gln Phe Arg Arg Leu Phe Ala Gln Leu Ala 40 Gly Asp Asp Met Glu Val Ser Ala Thr Glu Leu Met Asn Ile Leu Asn 55 Lys Val Val Thr Arg His Pro Asp Leu Lys Thr Asp Gly Phe Gly Ile 65 70 75 Asp Thr Cys Arg Ser Met Val Ala Val Met Asp Ser Asp Thr Thr Gly Lys Leu Gly Phe Glu Glu Phe Lys Tyr Leu Trp Asn Asn Ile Lys Arg 105 Trp Gln Ala Ile Tyr Lys Gln Phe Asp Thr Asp Arg Ser Gly Thr Ile 115 Cys Ser Ser Glu Leu Pro Gly Ala Phe Glu Ala Ala Gly Phe His Leu Asn Glu His Leu Tyr Asn Met Ile Ile Arg Arg Tyr Ser Asp Glu Ser 145 150 155 160

Gly Asn Met Asp Phe Asp Asn Phe Ile Ser Cys Leu Val Arg Leu Asp Ala Met Phe Arg Ala Phe Lys Ser Leu Asp Lys Asp Gly Thr Gly Gln 180 185 Ile Gln Val Asn Ile Gln Glu Trp Leu Gln Leu Thr Met Tyr Ser 200 <210> 1002 <211> 21 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (12) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1002 Ile Phe Cys Asp Thr Arg Ser His Gln Val Ala Xaa Gly Trp Phe Arg Ile Pro Gly Leu Lys 20 <210> 1003 <211> 109 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (15) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (19) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (103) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1003

Met Pro Gln Leu Gly Leu Ser Cys Ile Pro Val Glu Gly Pro Xaa Pro Cys Leu Xaa Glu Val Arg Leu Cys Cys Val Asn Gly Gln Ala Leu Pro 25 Gln Pro Thr Pro Gly Lys Val His Leu Phe Ser Gly Leu Tyr Lys Val 40 Ser Trp Gly Pro Val Ala Ser Leu Pro Val Arg Ser Asp Phe Ser Leu 55 60 Ser Ser Ser Pro Val Gly Glu Thr Lys Pro Asp Trp Gly Ala Gln Gly Glu His Gly Lys Gly Arg Leu Pro Cys Leu Ser Leu Ala Val Arg Val Arg Val Thr His Thr Lys Xaa Glu Cys Gly Gln Gln Val 100 105 <210> 1004 <211> 542 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (252) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (519) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1004

His 65	Leu	Asp	Tyr	Glu	Ile 70	Ile	Gln	Ser	Leu	Asn 75	Pro	Glu	Phe	Asn	80 FÅa
Ala	Val	Ile	Arg	Val 85	Asn	Val	Phe	Arg	Glu 90	His	Arg	Gln	Thr	Ile 95	Gln
туг	Ile	His	Pro 100	Ala	Asp	Ala	Val	Lys 105	Leu	Gly	Gln	Ala	Glu 110	Leu	Val
Val	Ile	Asp 115	Glu	Ala	Ala	Ala	Ile 120	Pro	Leu	Pro	Leu	Val 125	Lys	Ser	Leu
Leu	Gly 130	Pro	Tyr	Leu	Val	Phe 135	Met	Ala	Ser	Thr	Ile 140	Asn	Gly	Tyr	Glu
Gly 145	Thr	Gly	Arg	Ser	Leu 150	Ser	Leu	Lys	Leu	Ile 155	Gln	Gln	Leu	Arg	Gln 160
Gln	Ser	Ala	Gln	Ser 165	Gln	Val	Ser	Thr	Thr 170	Ala	Glu	Asn	Lys	Thr 175	Thr
Thr	Thr	Ala	Arg 180	Leu	Ala	Ser	Ala	Arg 185	Thr	Leu	His	Glu	Val 190	Ser	Leu
Gln	Glu	Ser 195	Ile	Arg	Tyr	Ala	Pro 200	Gly	Asp	Ala	Val	Glu 205	Lys	Trp	Leu
Asn	Asp 210	Leu	Leu	Суз	Leu	Asp 215	Cys	Leu	Asn	Ile	Thr 220	Arg	Ile	Val	Ser
Gly 225	Cys	Pro	Leu	Pro	Glu 230	Ala	Cys	Glu	Leu	Tyr 235	Tyr	Val	Asn	Arg	Asp 240
Thr	Leu	Phe	Суз	Tyr 245	His	Lys	Ala	Ser	Glu 250	Val	Xaa	Leu	Gln	Arg 255	Leu
Met	Ala	Leu	Tyr 260	Val	Ala	Ser	His	Туг 265	Lys	Asn	Ser	Pro	Asn 270	Asp	Leu
Gln	Met	Leu 275	Ser	Asp	Ala	Pro	Ala 280	His	His	Leu	Phe	Cys 285	Leu	Leu	Pro
Pro	Val 290	Pro	Pro	Thr	Gln	Asn 295	Ala	Leu	Pro	Glu	Val 300	Leu	Ala	Val	Ile
Gln 305	Val	Cys	Leu	Glu	Gly 310	Glu	Ile	Ser	Arg	Gln 315	Ser	Ile	Leu	Asn	Ser 320
Leu	Ser	Arg	Gly	Lys 325	Lys	Ala	Ser	Gly	Asp 330	Leu	Ile	Pro	Trp	Thr 335	Val

Ser Glu Gln Phe Gln Asp Pro Asp Phe Gly Gly Leu Ser Gly Gly Arg 340 345 350

Val Val Arg Ile Ala Val His Pro Asp Tyr Gln Gly Met Gly Tyr Gly
355 360 365

Ser Arg Ala Leu Gln Leu Leu Gln Met Tyr Tyr Glu Gly Arg Phe Pro 370 375 380

Cys Leu Glu Glu Lys Val Leu Glu Thr Pro Gln Glu Ile His Thr Val 385 390 395 400

Ser Ser Glu Ala Val Ser Leu Leu Glu Glu Val Ile Thr Pro Arg Lys 405 410 415

Asp Leu Pro Pro Leu Leu Leu Lys Leu Asn Glu Arg Pro Ala Glu Arg
420 425 430

Leu Asp Tyr Leu Gly Val Ser Tyr Gly Leu Thr Pro Arg Leu Leu Lys 435 440 445

Phe Trp Lys Arg Ala Gly Phe Val Pro Val Tyr Leu Arg Gln Thr Pro 450 455 460

Asn Asp Leu Thr Gly Glu His Ser Cys Ile Met Leu Lys Thr Leu Thr 465 470 475 480

Asp Glu Asp Glu Ala Asp Gln Gly Gly Trp Leu Ala Ala Phe Trp Lys
485 490 495

Asp Phe Arg Arg Phe Leu Ala Leu Leu Ser Tyr Gln Phe Ser Thr 500 505 510

Phe Ser Pro Ser Leu Ala Xaa Asn Ile Ile Gln Asn Arg Asn Met Gly 515 520 525

Lys Pro Ala Gln Pro Ala Leu Ser Arg Glu Glu Leu Glu Ala 530 535 540

<210> 1005

<211> 202

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (77)

<223> Xaa equals any of the naturally occurring L-amino acids

	> 10														
Asp 1	Ala	Ala	Asp	Thr 5	Ile	Glu	Thr	Asp	Thr 10	Ala	Thr	Ala	Asp	Thr 15	Thr
Val	Ala	Asn	Asn 20	Val	Pro	Pro	Ala	Ala 25	Thr	Ser	Leu	Ile	Asp 30	Leu	Trp
Pro	Gly	Asn 35	Gly	Glu	Gly	Ala	Ser 40	Thr	Leu	Gln	Gly	Glu 45	Pro	Arg	Ala
Pro	Thr 50	Pro	Pro	Ser	Gly	Thr 55	Glu	Val	Thr	Leu	Ala 60	Glu	Val	Pro	Leu
Leu 65	Asp	Glu	Val	Ala	Pro 70	Glu	Pro	Leu	Leu	Pro 75	Ala	Xaa	Glu	Gly	Cys 80
Ala	Thr	Leu	Leu	Asn 85	Phe	Asp	Glu	Leu	Pro 90	Glu	Pro	Pro	Ala	Thr 95	Phe
Суз	Asp	Pro	Glu 100	Glu	Val	Glu	Gly	Glu 105	Pro	Leu	Ala	Ala	Pro 110	Gln	Thr
Pro	Thr	Leu 115	Pro	Ser	Ala	Leu	Glu 120	Glu	Leu	Glu	Gln	Glu 125	Gln	Glu	Pro
Glu	Pro 130	His	Leu	Leu	Thr	Asn 135	Gly	Glu	Thr	Thr	Gln 140	Lys	Glu	Gly	Thr
Gln 145	Ala	Ser	Glu	Gly	Tyr 150	Phe	Ser	Gln	Ser	Gln 155	Glu	Glu	Glu	Phe	Ala 160
Gln	Ser	Glu	Glu	Leu 165	Cys	Ala	Lys	Ala	Pro 170	Pro	Pro	Val	Phe	Tyr 175	Asn
Lys	Pro	Pro	Glu 180	Ile	Asp	Ile	Thr	Cys 185	Trp	Asp	Ala	Asp	Pro 190	Val	Pro
Glu	Glu	Glu 195		Gly	Phe	Glu	G1y 200	Gly	Asp						

<210> 1006 <211> 561 <212> PRT <213> Homo sapiens

Leu	Ile	Trp	Val 20	Leu	Leu	Asp	Met	Phe 25	Leu	Leu	Leu	Tyr	Phe 30	Ser	Glu
Cys	Asn	Lys 35	Cys	Asp	Glu	Lys	Lys 40	Glu	Arg	Gly	Leu	Pro 45	Ala	Gly	Ası
Val	Leu 50	Glu	Pro	Val	Gln	Lys 55	Pro	His	Glu	Gly	Pro 60	Gly	Glu	Met	Gl
Lys 65	Pro	Val	Val	Ile	Pro 70	Lys	Glu	Asp	Gln	Glu 75	Lys	Met	Lys	Glu	Met 80
Phe	Lys	Ile	Asn	Gln 85	Phe	Asn	Leu	Met	Ala 90	Ser	Glu	Met	Ile	Ala 95	Let
Asn	Arg	Ser	Leu 100	Pro	Asp	Val	Arg	Leu 105	Glu	Gly	Cys	Lys	Thr 110	Lys	Va]
Tyr	Pro	Asp 115	Asn	Leu	Pro	Thr	Thr 120	Ser	Val	Val	Ile	Val 125	Phe	His	Asi
Glu	Ala 130	Trp	Ser	Thr	Leu	Leu 135	Arg	Thr	Val	His	Ser 140	Val	Ile	Asn	Arg
Ser 145	Pro	Arg	His	Met	Ile 150	Glu	Glu	Ile	Val	Leu 155	Val	Asp	Asp	Ala	Ser 160
Glu	Arg	Asp	Phe	Leu 165	Lys	Arg	Pro	Leu	Glu 170	Ser	Tyr	Val	Lys	Lys 175	Leu
Lys	Val	Pro	Val 180	His	Val	Ile	Arg	Met 185	Glu	Gln	Arg	Ser	Gly 190	Leu	Ile
Arg	Ala	Arg 195	Leu	Lys	Gly	Ala	Ala 200	Val	Ser	Lys	Gly	Gln 205	Val	Ile	Thr
	210				Cys	215					220				
225					His 230					235					240
				245	Asp				250					255	
			260		Asn			265					270		
Pro	Gln	Arg 275	Glu	Met	Asp	Arg	Arg 280	Lys	Gly	Asp	Arg	Thr 285	Leu	Pro	Val

Arg	290	PIO	Thr	met	Ala	295	GIY	ren	rne	ser	300	ASP	nrg	мэр	TYL
Phe 305	Gln	Glu	Ile	Gly	Thr 310	Tyr	Asp	Ala	Gly	Met 315	Asp	Ile	Trp	Gly	Gly 320
Glu	Asn	Leu	Glu	11e 325	Ser	Phe	Arg	Ile	Trp 330	Gln	Cys	Gly	Gly	Thr 335	Leu
Glu	Ile	Val	Thr 340	Суз	Ser	His	Val	Gly 345	His	Val	Phe	Arg	Lys 350	Ala	Thr
Pro	Tyr	Thr 355	Phe	Pro	Gly	Gly	Thr 360	Gly	Gln	Ile	Ile	Asn 365	Lys	Asn	Asn
Arg	Arg 370	Leu	Ala	Glu	Val	Trp 375	Met	Asp	Glu	Phe	380	Asn	Phe	Phe	Tyr
11e 385	Ile	Ser	Pro	Gly	Val 390	Thr	Lys	Val	Asp	Tyr 395	Gly	Asp	Ile	Ser	Ser 400
Arg	Val	Gly	Leu	Arg 405	His	Lys	Leu	Gln	Cys 410	Lys	Pro	Phe	Ser	Trp 415	Туг
Leu	Glu	Asn	Ile 420	Tyr	Pro	Asp	Ser	Gln 425	Ile	Pro	Arg	His	Tyr 430	Phe	Ser
Leu	Gly	Glu 435	Ile	Arg	Asn	Val	Glu 440	Thr	Asn	Gln	Суз	Leu 445	Asp	Asn	Met
Ala	Arg 450	Lys	Glu	Asn	Glu	Lys 455	Val	Gly	Ile	Phe	Asn 460	Cys	His	Gly	Met
Gly 465	Gly	Asn	Gln	Val	Phe 470	Ser	Tyr	Thr	Ala	Asn 475	Lys	Glu	Ile	Arg	Thr 480
Asp	Asp	Leu	Суз	Leu 485	Asp	Val	Ser	Lys	Leu 490	Asn	Gly	Pro	Val	Thr 495	Met
Leu	Lys	Cys	His 500	His	Leu	Lys	Gly	Asn 505	Gln	Leu	Trp	Glu	Tyr 510	Asp	Pro
Val	Lys	Leu 515	Thr	Leu	Gln	His	Val 520	Asn	Ser	Asn	Gln	Cys 525	Leu	Asp	Lys
	530					535					540	Asp			
Ser 545	Arg	Ser	Gln	Gln	Trp 550	Leu	Leu	Arg	Asn	Val 555	Thr	Leu	Pro	Glu	11e 560

PCT/US00/05882

Phe

<210> 1007 <211> 189

<212> PRT

<213> Homo sapiens

<400> 1007

Phe Ile Pro Ile Gly Glu Asn Ser Ala Thr Gly Glu Asn Arg Leu Ala 1 5 10 15

Ser Ala Leu Trp Ile Gly Asp Arg Ser Tyr Pro Gly Leu Ser Glu Gly 20 25 30

Asn Ser Arg Pro Pro Ile Pro Gly Pro Pro Tyr Val Ala Ser Pro Asp 35 40 45

Leu Trp Ser His Trp Glu Asp Ser Ala Leu Pro Pro Pro Ser Leu Arg
50 55 60

Pro Val Gln Pro Thr Trp Glu Gly Ser Ser Glu Ala Gly Leu Asp Trp 65 70 75 80

Ala Gly Ala Ser Phe Ser Pro Gly Thr Pro Met Trp Ala Ala Leu Asp 85 90 95

Glu Gln Met Leu Gln Glu Gly Ile Gln Ala Ser Leu Leu Asp Gly Pro 100 105 110

Ala Gln Glu Pro Gln Ser Ala Pro Trp Leu Ser Lys Ser Ser Val Ser 115 120 125

Ser Leu Arg Leu Gln Gln Leu Glu Arg Met Gly Phe Pro Thr Glu Gln 130 140

Ala Val Val Ala Leu Ala Ala Thr Gly Arg Val Glu Gly Ala Val Ser 145 150 155 160

Leu Leu Val Gly Gln Val Gly Thr Glu Thr Leu Val Thr His Gly
165 170 175

Lys Gly Gly Pro Ala His Ser Glu Gly Pro Gly Pro Pro 180 185

<210> 1008

<211> 300

~414	· F	K.T.													
<21:	3> He	omo:	sapi	ens											
<220)>														
	L> S:	ITE													
	2> (
			qual	s any	y of	the	nati	ıral	ly o	ccur	ring	L-a	nino	acio	ds
<22(1														
)> L> s:	אייז													
	2> (
	•	•	qual	s any	y of	the	nati	ıral	ly o	ccur	ring	L-a	nino	acio	is
			_												
<220															
	L> S:														
	2> (:	-	1 .					1 '	۱ م			T 0.			a_
\	32 X	aa e	quar:	s any	7 01	tne	natı	IIaI.	ry o	ecur.	LING	n-a	urno	acic	15
<400)> 10	800													
Arg	Gln	Lys	Ser	Ser	Xaa	Leu	Trp	Pro	His	Pro	Leu	Xaa	Arg	His	Arg
1				5					10					15	
	01	n	01	•		61		~ 1	G3	T1 -		D		T	~ 3
Ата	GTĀ	PIO	20	ren	Ala	GIY	Asn	25	GTĀ	TIE	Leu	PIO	30	rea	GIY
			20					23					30		
Asp	Gly	Gly	Gly	Gly	Trp	Xaa	Trp	Trp	Glu	Gly	Asn	His	Val	Leu	Leu
_	_	35	_	_	_		40					45			
Asn		Phe	Leu	Val	Pro		Ile	Pro	Arg	Pro		Arg	His	His	Thr
	50					55					60				
Ala	Asn	Agn	Thr	His	Pro	Leu	Ala	Gln	Ala	Ser	Tle	His	Met	Cvs	Cvs
65					70					75				-1-	80
				•											
Thr	Phe	Ser	Ser	Arg	His	Ala	Asp	Asn	Pro	Thr	Arg	Pro	His	His	His
				85					90					95	
				-1-	•••	m b	01	5			D		0 1	D	•••
Met	Pro	rys	100	Thr	нта	Thr	Glu	105	HIS	Arg	PIO	ser	110	Pro	Ата
			100					103					110		
3ly	Ser	Ser	Leu	Gly	Phe	Pro	Leu	Ala	His	Phe	Gln	Gly	Pro	Gly	Ala
-		115		-			120					125			
Ala		Lys	Cys	Glu	Ser		Val	Ala	Ala	Pro		Phe	Ser	Pro	Ser
	130					135					140				
Ph ∽	Se-	Tle	G1**	Dro	Tle	G1v	Lys	มเอ	Δτα	Glv	T.eu	ሞb≻ '	T.eu	Dhe	Hic
LAS	ser	TIE	GTĀ	PIO	150	GIA	пуя	uts	nr y	155	neu	THE	neu	FIIE	160
lle	Pro	Cys	Pro	Ala	Leu	Lys	Trp	Thr	Ile	Thr	Phe	Trp	Asp	Arg	Leu
		_		165					170					175	

Lys Phe Leu Lys Ser Leu His His Ser Val Pro Ser Lys Gly Ser Pro 180 185 Cys Gln Trp Gly Phe Glu Arg Glu Phe Leu Glu Pro Thr Phe Lys Phe 200 Cys Leu Ile Trp Arg Glu Thr Lys Ile Gly Arg Gly Lys Arg Thr Pro Asp Val Leu Leu Pro Glu Ile Leu Glu Thr Asp Ser Leu Asp Trp 225 230 235 Lys Met Asp Lys Ser Ala Leu Thr Trp Arg Val Gly Thr Arg Trp Gly 250 Pro Ala Leu Pro Thr Ala Ala Val Ala Ser Ser Leu Ala Gly Phe Ala 260 Gly Arg Gln Glu Gly Glu Gly Ser Thr Ala Arg Gly Thr Gly 280 Gly Ala Ala Gly Leu Gln Glu Leu Phe Phe His Cys 295 <210> 1009 <211> 344 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (10) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <223> Xaa equals any of the naturally occurring L-amino acids <400> 1009 Arg Pro Pro Cys Pro His Ser Arg Ser Xaa Trp Arg Ile Leu Ser Leu Thr Pro Asn Pro Asp Pro Leu Pro Asn Met Ser Val Phe Phe Ile 20 25

Phe Leu Asn Ile Phe Xaa Leu Ala Phe Ser Ser Pro Gly Ser Gln Pro 35 40 45

Leu	Leu 50	Asn	Ser	Pro	Pro	Ser 55	Phe	Val	Cys	Trp	Ser 60	Arg	Gly	Phe	Met
Glu 65	Met	Asn	Gly	Arg	Gly 70	Glu	Leu	Val	Glu	Ser 75	Leu	Lys	Arg	Phe	Cys 80
Ala	Ser	Thr	Arg	Leu 85	Pro	Pro	Thr	Pro	Leu 90	Leu	Leu	Phe	Pro	Glu 95	Glu
Glu	Ala	Thr	Asn 100	Gly	Arg	Glu	Gly	Leu 105	Leu	Arg	Phe	Ser	Ser 110	Trp	Pro
Phe	Ser	Ile 115	Gln	Asp	Val	Val	Gln 120	Pro	Leu	Thr	Leu	Gln 125	Val	Gln	Arg
Pro	Leu 130	Val	Ser	Val	Thr	Val 135	Ser	Asp	Ala	Ser	Trp 140	Val	Ser	Glu	Leu
Leu 145	Trp	Ser	Leu	Phe	Val 150	Pro	Phe	Thr	Val	туr 155	Gln	Val	Arg	Trp	Leu 160
Arg	Pro	Val	His	Arg 165	Gln	Leu	Gly	Glu	Ala 170	Asn	Glu	Glu	Phe	Ala 175	Leu
Arg	Val	Gln	Gln 180	Leu	Val	Ala	Lys	Glu 185	Leu	Gly	Gln	Thr	Gly 190	Thr	Arg
Leu	Thr	Pro 195	Ala	Asp	Lys	Ala	Glu 200	His	Met	Lys	Arg	Gln 205	Arg	His	Pro
Arg	Leu 210	Arg	Pro	Gln	Ser	Ala 215	Gln	Ser	Ser	Phe	Pro 220	Pro	Ser	Pro	Gly
Pro 225	Ser	Pro	Asp	Val	Gln 230	Leu	Ala	Thr	Leu	Ala 235	Gln	Arg	Val	Lys	Glu 240
Val	Leu	Pro	His	Val 245	Pro	Leu	Gly	Val	Ile 250	Gln	Arg	Asp	Leu	Ala 255	Lys
Thr	Gly	Cys	Val 260	Asp	Leu	Thr	Ile	Thr 265	Asn	Leu	Leu	Glu	Gly 270	Ala	Val
Ala	Phe	Met 275	Pro	Glu	Asp	Ile	Thr 280	Lys	Gly	Thr	Gln	Ser 285	Leu	Pro	Thr
Ala	Ser 290	Ala	Ser	Lys	Phe	Pro 295	Ser	Ser	Gly	Pro	Val 300	Thr	Pro	Gln	Pro
Thr 305	Ala	Leu	Thr	Phe	Ala 310	Lys	Ser	Ser	Trp	Ala 315	Arg	Gln	Glu	Ser	Leu 320

Gln Glu Arg Lys Gln Ala Leu Tyr Glu Tyr Ala Arg Arg Arg Phe Thr 325 330 335

Glu Arg Arg Ala Gln Glu Ala Asp 340

<210> 1010

<211> 233

<212> PRT

<213> Homo sapiens

<400> 1010

Pro His Cys Glu Pro Asn Pro Gly Ala Gly Ala Met Val Leu Leu His
1 5 10 15

Val Leu Phe Glu His Ala Val Gly Tyr Ala Leu Leu Ala Leu Lys Glu 20 25 30

Val Glu Glu Ile Ser Leu Leu Gln Pro Gln Val Glu Glu Ser Val Leu 35 40 45

Asn Leu Gly Lys Phe His Ser Ile Val Arg Leu Val Ala Phe Cys Pro 50 60

Phe Ala Ser Ser Gln Val Ala Leu Glu Asn Ala Asn Ala Val Ser Glu 65 70 75 80

Gly Val Val His Glu Asp Leu Arg Leu Leu Leu Glu Thr His Leu Pro 85 90 95

Ser Lys Lys Lys Val Leu Leu Gly Val Gly Asp Pro Lys Ile Gly 100 105 110

Ala Ala Ile Gln Glu Glu Leu Gly Tyr Asn Cys Gln Thr Gly Gly Val 115 120 125

Ile Ala Glu Ile Leu Arg Gly Val Arg Leu His Phe His Asn Leu Val 130 135 140

Lys Gly Leu Thr Asp Leu Ser Ala Cys Lys Ala Gln Leu Gly Leu Gly 145 150 155 160

His Ser Tyr Ser Arg Ala Lys Val Lys Phe Asn Val Asn Arg Val Asp 165 170 175

Asn Met Ile Ile Gln Ser Ile Ser Leu Leu Asp Gln Leu Asp Lys Asp 180 185 190 Ile Asn Thr Phe Ser Met Arg Val Arg Glu Trp Tyr Gly Tyr His Phe 195 200 205

Pro Glu Leu Val Lys Ile Ile Asn Asp Asn Ala Thr Tyr Cys Arg Leu 210 215 220

Ala Gln Phe Ile Gly Asn Arg Arg Asn 225 230

<210> 1011

<211> 187

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1011

Gly Thr Ser Xaa Phe Ser Phe Pro Leu Gly Arg Glu Glu Ala Met Ala 1 5 10 15

Ala Met Ala Ser Leu Gly Ala Leu Ala Leu Leu Leu Ser Ser Leu 20 25 30

Ser Arg Cys Ser Ala Glu Ala Cys Leu Glu Pro Gln Ile Thr Pro Ser 35 40 45

Tyr Tyr Thr Thr Ser Asp Ala Val Ile Ser Thr Glu Thr Val Phe Ile 50 55 60

Val Glu Ile Ser Leu Thr Cys Lys Asn Arg Val Gln Asn Met Ala Leu 65 70 75 80

Tyr Ala Asp Val Gly Gly Lys Gln Phe Pro Val Thr Arg Gly Gln Asp 85 90 95

Val Gly Arg Tyr Gln Val Ser Trp Ser Leu Asp His Lys Ser Ala His 100 105 110

Ala Gly Thr Tyr Glu Val Arg Phe Phe Asp Glu Glu Ser Tyr Ser Leu 115 120 125

Leu Arg Lys Ala Gln Arg Asn Asn Glu Asp Ile Ser Ile Ile Pro Pro 130 135 140

Leu Phe Thr Val Ser Val Asp His Arg Gly Thr Trp Asn Gly Pro Trp 145 150 155 160

Val Ser Thr Glu Val Leu Ala Ala Ala Ile Gly Leu Val Ile Tyr Tyr 165 170 175

Leu Ala Phe Ser Ala Lys Ser His Ile Gln Ala 180 185

<210> 1012

<211> 708

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (18)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (153)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (229)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (433)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1012

Ala Leu Arg Pro Ile Ser Ser Val Arg Ala Gly Asp Arg Cys Gln Arg 1 5 10 15

Ser Xaa Ala Ala Asp Met Ala Ala Ser Thr Ala Ala Gly Lys Gln Arg 20 25 30

Ile Pro Lys Val Ala Lys Val Lys Asn Lys Ala Pro Ala Glu Val Gln 35 40 45

Ile Thr Ala Glu Gln Leu Leu Arg Glu Ala Lys Glu Arg Glu Leu Glu
50 55 60

Leu Leu Pro Pro Pro Gln Gln Lys Ile Thr Asp Glu Glu Glu Leu 65 70 75 80

Asn Asp Tyr Lys Leu Arg Lys Arg Lys Thr Phe Glu Asp Asn Ile Arg

				85					90					95	
Lys	Asn	Arg	Thr 100	Val	Ile	Ser	Asn	Trp 105	Ile	Lys	Tyr	Ala	Gln 110	Trp	Glu
Glu	Ser	Leu 115	Lys	Glu	Ile	Gln	Arg 120	Ala	Arg	Ser	Ile	Tyr 125	Glu	Arg	Ala
Leu	Asp 130	Val	Asp	Tyr	Arg	Asn 135	Ile	Thr	Leu	Trp	Leu 140	Lys	Tyr	Ala	Glu
Met 145	Glu	Met	Lys	Asn	Arg 150	Gln	Val	Xaa	His	Ala 155	Arg	Asn	Ile	Trp	Asp 160
Arg	Ala	Ile	Thr	Thr 165	Leu	Pro	Arg	Val	Asn 170	Gln	Phe	Trp	Tyr	Lys 175	Tyr
Thr	Tyr	Met	Glu 180	Glu	Met	Leu	Gly	Asn 185	Val	Ala	Gly	Ala	Arg 190	Gln	Val
Phe	Glu	Arg 195	Trp	Met	Glu	Trp	Gln 200	Pro	Glu	Glu	Gln	Ala 205	Trp	His	Ser
Tyr	Ile 210	Asn	Phe	Glu	Leu	Arg 215	Tyr	Lys	Glu	Val	Asp 220	Arg	Ala	Arg	Thr
Ile 225	Tyr	Glu	Arg	Xaa	Val 230	Leu	Val	His	Pro	Asp 235	Val	Lys	Asn	Trp	11e 240
Lys	Tyr	Ala	Arg	Phe 245	Glu	Glu	Lys	His	Ala 250	Tyr	Phe	Ala	His	Ala 255	Arg
Lys	Val	Tyr	Glu 260	Arg	Ala	Val	Glu	Phe 265	Phe	Gly	Asp	Glu	His 270	Met	Asp
Glu	His	Leu 275	Tyr	Val	Ala	Phe	Ala 280	Lys	Phe	Glu	Glu	Asn 285	Gln	Lys	Glu
Phe	Glu 290	Arg	Val	Arg	Val	Ile 295	Tyr	Lys	Tyr	Ala	Leu 300	Asp	Arg	Ile	Ser
Lys 305	Gln	Asp	Ala	Gln	Glu 310	Leu	Phe	Lys	Asn	Tyr 315	Thr	Ile	Phe	Glu	Lys 320
ГÀЗ	Phe	Gly	Asp	Arg 325	Arg	Gly	Ile	Glu	Asp 330	Ile	Ile	Val	Ser	Lys 335	Arg
Arg	Phe	Gln	Tyr 340	Glu	Glu	Glu	Val	Lys 345	Ala	Asn	Pro	His	Asn 350	Tyr	Asp
Δla	Tro	Phe	Agn	ጥህተ	T.e.n	Ara	T.eu	Va I	Glu	Ser	Asn	Δla	Glu	Ala	Glu

		355					360					365	•		
Ala	Val 370		Glu	Val	Tyr	Glu 375		Ala	Ile	Ala	Asn 380		. Pro	Pro	Ile
Gln 385		Lys	Arg	His	Trp 390		Arg	Tyr	Ile	Tyr 395		Trp	Ile	Asn	Ту1 400
Ala	Leu	Tyr	Glu	Glu 405	Leu	Glu	Ala	Lys	Asp 410		Glu	Arg	Thr	Arg 415	
Val	Tyr	Gln	Ala 420		Leu	Glu	Leu	Ile 425		His	Lys	Lys	Phe 430		Phe
Xaa	Lys	Met 435		Ile	Leu	Tyr	Ala 440		Phe	Glu	Ile	Arg 445		Lys	Asn
Leu	Ser 450	Leu	Ala	Arg	Arg	Ala 455		Gly	Thr	Ser	Ile 460	Gly	Lys	Cys	Pro
Lys 465		Lys	Leu	Phe	Lys 470	Val	Tyr	Ile	Glu	Leu 475	Glu	Leu	Gln	Leu	Arg 480
Glu	Phe	Asp	Arg	Cys 485	Arg	Lys	Leu	Tyr	Glu 490	Lys	Phe	Leu	Glu	Phe 495	Gly
			500		Ser			505					510		
		515			Arg		520					525			
	530				Met	535					540				_
545					Glu 550					555					560
•				565	Thr				570					575	
			580		Ser			585					590		
		595			Ala		600					605			
	610				Leu	615					620				
Phe	Gly	Thr	Ala	Ser	Asp	Lys	Glu	Arg	Val	Asp	Lys	Leu	Met	Pro	Glu

625 630 635 640 Lys Val Lys Lys Arg Arg Lys Val Gln Thr Asp Asp Gly Ser Asp Ala 650 Gly Trp Glu Glu Tyr Phe Asp Tyr Ile Phe Pro Glu Asp Ala Ala Asn 665 660 Gln Pro Asn Leu Lys Leu Leu Ala Met Ala Lys Leu Trp Lys Lys Gln 680 Gln Gln Glu Lys Glu Asp Ala Glu His His Pro Asp Glu Asp Val Asp 695 Glu Ser Glu Ser <210> 1013 <211> 183 <212> PRT <213> Homo sapiens <400> 1013 Leu Pro Pro Gln Val Ala Asp Thr Met Leu Pro Pro Met Ala Leu Pro Ser Val Ser Trp Met Leu Leu Ser Cys Leu Met Leu Leu Ser Gln Val 25 Gln Gly Glu Glu Pro Gln Arg Glu Leu Pro Ser Ala Arg Ile Arg Cys 35 Pro Lys Gly Ser Lys Ala Tyr Gly Ser His Cys Tyr Ala Leu Phe Leu 55 Ser Pro Lys Ser Trp Thr Asp Ala Asp Leu Ala Cys Gln Lys Arg Pro Ser Gly Asn Leu Val Ser Val Leu Ser Gly Ala Glu Gly Ser Phe Val Ser Ser Leu Val Lys Ser Ile Gly Asn Ser Tyr Ser Tyr Val Trp Ile 105 Gly Leu His Asp Pro Thr Gln Gly Thr Glu Pro Asn Gly Glu Gly Trp 115 120 Glu Trp Ser Ser Ser Asp Val Met Asn Tyr Phe Ala Trp Glu Arg Asn 130 135 140

Pro Ser Thr Ile Ser Ser Pro Gly His Cys Ala Ser Leu Ser Arg Ser 145 150 155 160

Thr Ala Phe Leu Arg Trp Lys Asp Tyr Asn Cys Asn Val Arg Leu Pro 165 170 175

Tyr Val Cys Lys Phe Thr Asp 180

<210> 1014

<211> 213

<212> PRT

<213> Homo sapiens

<400> 1014

Val Thr Asp Gly Gly Ser Ala Arg Lys Pro Lys Met Ala Val Pro Ala 1 5 . . 10 15

Ala Leu Ile Leu Arg Glu Ser Pro Ser Met Lys Lys Ala Val Ser Leu 20 25 30

Ile Asn Ala Ile Asp Thr Gly Arg Phe Pro Arg Leu Leu Thr Arg Ile
35 40 45

Leu Gln Lys Leu His Leu Lys Ala Glu Ser Ser Phe Ser Glu Glu Glu 50 60

Glu Glu Lys Leu Gln Ala Ala Phe Ser Leu Glu Lys Gln Asp Leu His 65 70 75 80

Leu Val Leu Glu Thr Ile Ser Phe Ile Leu Glu Gln Ala Val Tyr His
85 90 95

Asn Val Lys Pro Ala Ala Leu Gln Gln Gln Leu Glu Asn Ile His Leu 100 105 110

Arg Gln Asp Lys Ala Glu Ala Phe Val Asn Thr Trp Ser Ser Met Gly
115 120 125

Gln Glu Thr Val Glu Lys Phe Arg Gln Arg Ile Leu Ala Pro Cys Lys 130 135 140

Leu Glu Thr Val Gly Trp Gln Leu Asn Teu Gln Met Ala His Ser Ala 145 150 155 160

Gln Ala Lys Leu Lys Ser Pro Gln Ala Val Leu Gln Leu Gly Val Asn 165 170 175

Asn Glu Asp Ser Lys Ser Leu Glu Lys Val Leu Val Glu Phe Ser His 180 185 190

Lys Glu Leu Phe Asp Phe Tyr Asn Lys Leu Glu Thr Ile Gln Ala Gln 195 200 205

Leu Asp Ser Leu Thr 210

<210> 1015

<211> 544

<212> PRT

<213> Homo sapiens

<400> 1015

Ala Pro Gly Thr Met Asn Gly Glu Ala Ile Cys Ser Ala Leu Pro Thr
1 5 10 15

Ile Pro Tyr His Lys Leu Ala Asp Leu Arg Tyr Leu Ser Arg Gly Ala 20 25 30

Ser Gly Thr Val Ser Ser Ala Arg His Ala Asp Trp Arg Val Gln Val 35 40 45

Ala Val Lys His Leu His Ile His Thr Pro Leu Leu Asp Ser Glu Arg 50 60

Lys Asp Val Leu Arg Glu Ala Glu Ile Leu His Lys Ala Arg Phe Ser 65 70 75 80

Tyr Ile Leu Pro Ile Leu Gly Ile Cys Asn Glu Pro Glu Phe Leu Gly
85 90 95

Ile Val Thr Glu Tyr Met Pro Asn Gly Ser Leu Asn Glu Leu Leu His 100 105 110

Arg Lys Thr Glu Tyr Pro Asp Val Ala Trp Pro Leu Arg Phe Arg Ile 115 120 125

Leu His Glu Ile Ala Leu Gly Val Asn Tyr Leu His Asn Met Thr Pro 130 135 140

Pro Leu Leu His His Asp Leu Lys Thr Gln Asn Ile Leu Leu Asp Asn 145 150 155 160

Glu Phe His Val Lys Ile Ala Asp Phe Gly Leu Ser Lys Trp Arg Met 165 170 175

Met Ser Leu Ser Gln Ser Arg Ser Ser Lys Ser Ala Pro Glu Gly Gly

			180					185					190		
Thr	Ile	Ile 195	Tyr	Met	Pro	Pro	Glu 200	Asn	Tyr	Glu	Pro	Gly 205	Gln	Lys	Ser
Arg	Ala 210	Ser	Ile	Lys	His	Asp 215	Ile	Tyr	Ser	Tyr	Ala 220	Val	Ile	Thr	Trp
Glu 225	Val	Leu	Ser	Arg	Lys 230	Gln	Pro	Phe	Glu	Asp 235	Val	Thr	Asn	Pro	Leu 240
Gln	Ile	Met	Tyr	Ser 245	Val	ser	Gln	Gly	His 250	Arg	Pro	Val	Ile	Asn 255	Glu
Glu	Ser	Leu	Pro 260	Tyr	Asp	Ile	Pro	His 265	Arg	Ala	Arg	Met	Ile 270	Ser	Leu
Ile	Glu	Ser 275	Gly	Trp	Ala	Gln	Asn 280	Pro	Asp	Glu	Arg	Pro 285	Ser	Phe	Leu
Lys	Сув 290	Leu	Ile	Glu	Leu	Glu 295	Pro	Val	Leu	Arg	Thr 300	Phe	Glu	Glu	Ile
Thr 305	Phe	Leu	Glu	Ala	Val 310	Ile	Gln	Leu	Lys	Lys 315	Thr	Lys	Leu	Gln	Ser 320
Val	Ser	Ser	Ala	Ile 325	His	Leu	Cys	Asp	330	Lys	Lys	Met	Glu	Leu 335	Ser
Leu	Asn	Ile	Pro 340	Val	Asn	His	Gly	Pro 345	Gln	Glu	Glu	Ser	Cys 350	Gly	Ser
Ser	Gln	Leu 355	His	Glu	Asn	Ser	Gly 360	Ser	Pro	Glu	Thr	Ser 365	Arg	Ser	Leu
Pro	Ala 370	Pro	Gln	Asp	Asn	Asp 375	Phe	Leu	Ser	Arg	Lys 380	Ala	Gln	Asp	Суз
Туг 385	Phe	Met	Lys	Leu	His 390	His	Суз	Pro	Gly	Asn 395	His	Ser	Trp	Asp	Ser 400
Thr	Ile	Ser	Gly	Ser 405	Gln	Arg	Ala	Ala	Phe 410	Cys	Asp	His	Lys	Thr 415	Thr
Pro	Суѕ	Ser	Ser 420	Ala	Ile	Ile	Asn	Pro 425	Leu	Ser	Thr	Ala	Gly 430	Asn	Ser
Glu	Arg	Leu 435	Gln	Pro	Gly	Ile	Ala 440	Gln	Gln	Trp	Ile	Gln 445	Ser	Lys	Arg
Glu	Asp	Ile	Val	Asn	Gln	Met	Thr	Glu	Ala	Cys	Leu	Asn	Gln	Ser	Leu

460 450 455 Asp Ala Leu Leu Ser Arg Asp Leu Ile Met Lys Glu Asp Tyr Glu Leu 470 475 Val Ser Thr Lys Pro Thr Arg Thr Ser Lys Val Arg Gln Leu Leu Asp 490 485 Thr Thr Asp Ile Gln Gly Glu Glu Phe Ala Lys Val Ile Val Gln Lys 505 Leu Lys Asp Asn Lys Gln Met Gly Leu Gln Pro Tyr Pro Glu Ile Leu 520 Val Val Ser Arg Ser Pro Ser Leu Asn Leu Gln Asn Lys Ser Met 530 535 <210> 1016 <211> 257 <212> PRT <213> Homo sapiens <400> 1016 His Pro Ser Ala Pro Arg Ala Gly Lys Ala His Leu Lys Arg Ala Ile Leu Gly Gln Glu Glu Ala Leu Arg Leu His Ala Leu Cys Arg Val Leu 25 Arg Glu Val Asp Leu Leu Arg Ala Val Ile Ser Gln Thr Leu Gln Arg 40 Ser Leu Ala Lys Tyr Ala Glu Leu Asp Arg Glu Asp Asp Phe Cys Glu 55 Ala Ala Glu Ala Pro Asp Ile Gln Pro Lys Thr His Gln Lys Pro Glu 65 Ala Arg Met Pro Arg Leu Ser Gln Gly Lys Gly Pro Asp Ile Phe His

Arg Leu Gly Pro Leu Ser Val Phe Ser Ala Lys Asn Arg Trp Arg Leu

Val Gly Pro Val His Leu Thr Arg Gly Glu Gly Phe Gly Leu Thr 120

115

Leu Arg Gly Asp Ser Pro Val Leu Ile Ala Ala Val Ile Pro Gly Ser 135 Gln Ala Ala Ala Gly Leu Lys Glu Gly Asp Tyr Ile Val Ser Val 150 155 Asn Gly Gln Pro Cys Arg Trp Trp Arg His Ala Glu Val Val Thr Glu 170 Leu Lys Ala Ala Gly Glu Ala Gly Ala Ser Leu Gln Val Val Ser Leu 180 185 Leu Pro Ser Ser Arg Leu Pro Ser Leu Gly Asp Arg Arg Pro Val Leu 200 Leu Gly Pro Arg Gly Leu Leu Arg Ser Gln Arg Glu His Gly Cys Lys Thr Pro Ala Ser Thr Trp Ala Ser Pro Arg Ala Leu Leu Asn Trp Ser 230 235 Arg Lys Ala Gln Gln Gly Lys Thr Gly Gly Cys Pro Ser Pro Val Pro 250 Gln

<210> 1017 <211> 248 <212> PRT <213> Homo sapiens

<400> 1017

Ala Ser Asp Arg Gly Tyr Ser Ser Arg Ile Val Gly Gly Asn Met
1 5 10 15

Ser Leu Leu Ser Gln Trp Pro Trp Gln Ala Ser Leu Gln Phe Gln Gly
20 25 30

Tyr His Leu Cys Gly Gly Ser Val Ile Thr Pro Leu Trp Ile Ile Thr 35 40 45

Ala Ala His Cys Val Tyr Asp Leu Tyr Leu Pro Lys Ser Trp Thr Ile 50 55 60

Gln Val Gly Leu Val Ser Leu Leu Asp Asn Pro Ala Pro Ser His Leu 65 70 75 80

Val Glu Lys Ile Val Tyr His Ser Lys Tyr Lys Pro Lys Arg Leu Gly 90 Asn Asp Ile Ala Leu Met Lys Leu Ala Gly Pro Leu Thr Phe Asn Glu 100 Met Ile Gln Pro Val Cys Leu Pro Asn Ser Glu Glu Asn Phe Pro Asp 120 Gly Lys Val Cys Trp Thr Ser Gly Trp Gly Ala Thr Glu Asp Gly Ala Gly Asp Ala Ser Pro Val Leu Asn His Ala Ala Val Pro Leu Ile Ser 145 150 155 Asn Lys Ile Cys Asn His Arg Asp Val Tyr Gly Gly Ile Ile Ser Pro 170 Ser Met Leu Cys Ala Gly Tyr Leu Thr Gly Gly Val Asp Ser Cys Gln 180 Gly Asp Ser Gly Gly Pro Leu Val Cys Gln Glu Arg Arg Leu Trp Lys 200 Leu Val Gly Ala Thr Ser Phe Gly Ile Gly Cys Ala Glu Val Asn Lys 215 Pro Gly Val Tyr Thr Arg Val Thr Ser Phe Leu Asp Trp Ile His Glu 225 230 235 240 Gln Met Glu Arg Asp Leu Lys Thr 245

<210> 1018

<211> 224

<212> PRT

<213> Homo sapiens

<400> 1018

Gly Arg Val Ser Ala Pro Val Pro Gly Lys Met Val Leu Gly Gly Cys
1 5 10 15

Pro Val Ser Tyr Leu Leu Cys Gly Gln Ala Ala Leu Leu Gly 20 25 30

Asn Leu Leu Leu His Cys Val Ser Arg Ser His Ser Gln Asn Ala 35 40 45

Thr Ala Glu Pro Glu Leu Thr Ser Ala Gly Ala Ala Gln Pro Glu Gly

	50					55					60				
Pro 65	Gly	Gly	Ala	Ala	Ser 70	Trp	Glu	Tyr	Gly	Asp 75	Pro	His	Ser	Pro	Val 80
Ile	Leu	Суз	Ser	Tyr 85	Leu	Pro	Asp	Glu	Phe 90	Ile	Glu	Cys	Glu	Asp 95	Pro
Val	Asp	His	Val 100	Gly	Asn	Ala	Thr	Ala 105	Ser	Gln	Glu	Leu	Gly 110	Tyr	Gly
Cys	Leu	Lys 115	Phe	Gly	Gly	Gln	Ala 120	Tyr	Ser	Asp	Val	Glu 125	His	Thr	Ser
Val	Gln 130	Cys	His	Ala	Leu	Asp 135	Gly	Ile	Glu	Cys	Ala 140	Ser	Pro	Arg	Thr
Phe 145	Leu	Arg	Glu	Asn	Lys 150	Pro	Cys	Ile	Lys	Туг 155	Thr	Gly	His	Tyr	Phe 160
Ile	Thr	Thr	Leu	Leu 165	Tyr	Ser	Phe	Phe	Leu 170	Gly	Cys	Phe	Gly	Val 175	Asp
Arg	Phe	Cys	Leu 180	Gly	His	Thr	Gly	Thr 185	Ala	Val	Gly	Lys	Leu 190	Leu	Thr
Leu	Gly	Gly 195	Leu	Gly	Ile	Trp	Trp 200	Phe	Val	Asp	Leu	Ile 205	Leu	Leu	Ile
Thr	Gly 210	Gly	Leu	Met	Pro	Ser 215	Asp	Gly	Ser	Asn	Trp 220	Cys	Thr	Val	Туг

<210> 1019 <211> 53

<212> PRT

<213> Homo sapiens

<400> 1019

Asn Val Pro Val Cys His Leu Ser Thr Trp Lys Ile Leu Tyr Ile Trp 1 5 10 15

Lys Val Tyr Ala Ser Leu Asn Lys Tyr Met Leu Leu Asn Lys Pro Tyr
20 25 30

His Ser Leu Arg Asn Cys Ile Tyr Phe Ile Ile Cys Pro Phe Arg Asn $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Gln Val Phe Cys Ile 50

<210> 1020

<211> 70

<212> PRT

<213> Homo sapiens

<400> 1020

Phe Tyr Thr Asn Leu Ile Trp Leu Pro Phe Val Pro Leu Ile Ser Gln 1 5 10 15

Met Phe Lys Cys Ile Gly Phe Gly Phe Ser Met Tyr Lys Leu Pro Tyr 20 25 30

Leu Leu Met Ser Ile Phe Cys Leu Phe Asn Phe Val Tyr Leu Leu Phe 35 40 45

Cys Phe Trp Ile His Phe Leu Ile Arg Ser His Met Ile Asn Ile Ile 50 55 60

Ser Ile Val Ile Ile Pro 65 70

<210> 1021

<211> 337

<212> PRT

<213> Homo sapiens

<400> 1021

Arg Lys Arg Lys Gln Ala Ala Arg Ala Ala Glu Glu Pro Gly Ala Ala 1 5 10 15

Met Asp Val Arg Ala Leu Pro Trp Leu Pro Trp Leu Leu Trp Leu Leu 20 25 30

Cys Arg Gly Gly Asp Ala Asp Ser Arg Ala Pro Phe Thr Pro Thr $35 \hspace{1cm} 40 \hspace{1cm} 45$

Trp Pro Arg Ser Arg Glu Arg Glu Ala Ala Ala Phe Arg Glu Ser Leu 50 55 60

Asn Arg His Arg Tyr Leu Asn Ser Leu Phe Pro Ser Glu Asn Ser Thr
65 70 75 80

Ala Phe Tyr Gly Ile Asn Gln Phe Ser Tyr Leu Phe Pro Glu Glu Phe

				85					90				•	95	
Lys	Ala	Ile	Tyr 100	Leu	Arg	Ser	Lys	Pro 105	Ser	Lys	Phe	Pro	Arg 110	Tyr	Ser
Ala	Glu	Val 115	His	Met	Ser	Ile	Pro 120	Asn	Val	Ser	Leu	Pro 125	Leu	Arg	Phe
Asp	Trp 130	Arg	Asp	Lys	Gln	Val 135	Val	Thr	Gln	Val	Arg 140	Asn	Gln	Gln	Met
Cys 145	Gly	Gly	Cys	Trp	Ala 150	Phe	Ser	Val	Val	Gly 155	Ala	Val	Glu	Ser	Ala 160
Tyr	Ala	Ile	Lys	Gly 165	Lys	Pro	Leu	Glu	Asp 170	Leu	Ser	Val	Gln	Gln 175	Val
Ile	Asp	Суѕ	Ser 180	Tyr	Asn	Asn	Tyr	Gly 185	Суз	Asn	Gly	Gly	Ser 190	Thr	Leu
Asn	Ala	Leu 195	Asn	Trp	Leu	Asn	Lys 200	Met	Gln	Val	Lys	Leu 205	Val	Lys	Asp
Ser	Glu 210	Tyr	Pro	Phe	Lys	Ala 215	Gln	Asn	Gly	Leu	Cys 220	His	Tyr	Phe	Ser
Gly 225	Ser	His	Ser	Gly	Phe 230	Ser	Ile	Lys	Gly	Tyr 235	Ser	Ala	Tyr	Asp	Phe 240
Ser	Asp	Gln	Glu	Asp 245	Glu	Met	Ala	Lys	Ala 250	Leu	Leu	Thr	Phe	Gly 255	Pro
Leu	Val	Val	Ile 260	Val	Asp	Ala	Val	Ser 265	Trp	Gln	ĄsĄ	Tyr	Leu 270	Gly	Gly
		275			Cys		280	_				285			
	290				Lys	295					300				
Asn 305	Ser	Trp	Gly	Ser	Ser 310	Trp	Gly	Val	Asp	Gly 315	Tyr	Ala	His	Val	Lys 320
Met	Gly	Ser	Asn	Val 325	Cys	Gly	Ile	Ala	Asp 330	Ser	Val	Ser	Ser	11e 335	Phe

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<220> <221> SITE <222> (42)

<210> 1022 <211> 134 <212> PRT <213> Homo sapiens <400> 1022 Ala Ser Ala Glu Phe Glu Met Ala Gly Gly Lys Ala Gly Lys Asp Ser Gly Lys Ala Lys Thr Lys Ala Val Ser Arg Ser Gln Arg Ala Gly Leu Gln Phe Pro Val Gly Arg Ile His Arg His Leu Lys Ser Arg Thr Thr 40 Ser His Gly Arg Val Gly Ala Thr Ala Ala Val Tyr Ser Ala Ala Ile 55 Leu Glu Tyr Leu Thr Ala Glu Val Leu Glu Leu Ala Gly Asn Ala Ser Lys Asp Leu Lys Val Lys Arg Ile Thr Pro Arg His Leu Gln Leu Ala 85 Ile Arg Gly Asp Glu Glu Leu Asp Ser Leu Ile Lys Ala Thr Ile Ala 100 105 Gly Gly Val Ile Pro His Ile His Lys Ser Leu Ile Gly Lys Lys 120 Gly Gln Gln Lys Thr Val 130 <210> 1023 <211> 226 <212> PRT <213> Homo sapiens <220> <221> SITE

<223> Xaa equals any of the naturally occurring L-amino acids

<223> Xaa equals any of the naturally occurring L-amino acids

WO 00/55350 PCT/US00/05882

996

<22	0>														
<22	1> S	ITE													
<22	2> (67)													
<22	3> X	aa e	qual	s any	y of	the	nati	ural	ly o	ccur	ring	L-aı	mino	acio	ds
<40	0> 1	023													
Gly 1	Leu	Phe	Gln	Thr 5	Суѕ	Ile	His	Leu	Leu 10	Thr	Leu	Pro	Val	Leu 15	Val
His	Gly	Glu	Leu 20	Phe	Ala	Pro	Pro	Arg 25	Trp	Leu	Arg	Arg	Ala 30	Ala	Gly
Xaa	Pro	Trp 35	Thr	Leu	Val	Thr	Ser 40	Суз	Хаа	Ser	Leu	Arg 45	Pro	Ser	Gly
Pro	Cys 50	Pro	Arg	Pro	Gly	Arg 55	Ala	Leu	Leu	Pro	Ser 60	Суз	Ala	Pro	Ala
Ala 65	Arg	Xaa	Pro	Trp	Gly 70	Gly	Val	Val	Trp	Cys 75	Trp	Glu	Gly	Val	Leu 80
Gln	Gly	Glu	Glu	Asp 85	Leu	Glu	Gly	Leu	Gly 90	Ala	Ala	Val	Leu	Asn 95	Arg
Leu	Thr	Leu	Arg 100	Arg	Pro	Leu	Ser	Ala 105	Ala	Leu	Leu	Phe	Ile 110	Thr	Val
Pro	His	Ser 115	Gly	Arg	Arg	Ser	Pro 120	Val	Ala	Gly	Gln	Val 125	Pro	Met	Ala
Cys	Ser 130	Leu	Glu	Pro	Asp	Phe 135	Arg	Cys	Phe	Gly	Ile 140	Arg	Ser	Pro	Gln
His 145	Arg	Gln	Val	His	Pro 150	Ile	Ile	Thr	Leu	Pro 155	Val	Pro	Gly	Trp	Ala 160
Gly	Asp	Ser	Gly	Thr 165	Val	Met	Pro	Gly	Ala 170	Arg	Thr	Ala	Ala	Leu 175	Pro
Leu	His	Thr	Asp 180	Gly	Leu	Gly	Val	Ala 185	Leu	Arg	Pro	His	Pro 190	Thr	Leu
Ile	Ser	Gly 195	Arg	Gly	Ser	Pro	Glu 200	Trp	Ser	Leu	Val	Arg 205	Ala	Val	Ala
Lys	Pro 210	Ala	Val	Ser	Phe	Leu 215	His	Lys	Val	Pro	Pro 220	Pro	Leu	Ser	Val

Ser Gly 225

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<21	2> P	RT													
			sapi	ens											
<22	0>														
<22	1> s:	ITE													
<22	2> (3301													
	•	•	qual	s an	y of	the	nati	ural	ly o	ccur	ring	L-a	mino	aci	ds
<40	0> 10	024													
Gln 1	Gly	Lys	Lys	Arg 5	Ala	Gly	Asn	Phe	Ala 10	Ile	Met	Glu	Ile	Gln 15	Cys
Pro	Ala	Leu	Arg 20	Lys	Thr	Leu	Pro	Ile 25	Leu	Phe	Gly	Ser	Leu 30	Arg	Arg
Cys	Leu	Cys 35	Leu	Ser	Asp	Lys	Tyr 40	Ser	Gln	Ala	Cys	His 45	Pro	Leu	Gly
Ser	Lys 50	Val	Arg	Arg	Cys	Arg 55	Lys	Pro	Gly	Pro	Arg 60	Asp	Arg	Gln	Leu
Thr 65	Arg	Val	Asp	Lys	Ser 70	Pro	Glu	Met	Trp	Cys 75	Ile	Val	Leu	Phe	Ser 80
Leu	Leu	Ala	Trp	Val 85	Tyr	Ala	Glu	Pro	Thr 90	Met	Tyr	Gly	Glu	Ile 95	Leu
Ser	Pro	Asn	Tyr 100	Pro	Gln	Ala	туг	Pro 105	Ser	Glu	Val	Glu	Lys 110	Ser	Trp
Asp	Ile	Glu 115	Val	Pro	Glu	Gly	Tyr 120	Gly	Ile	His	Leu	Туг 125	Phe	Thr	His
Leu	Asp 130	Ile	Glu	Leu	Ser	Glu 135	Asn	Cys	Ala	Tyr	Asp 140	Ser	Val	Gln	Ile
Ile 145	Ser	Gly	Asp	Thr	Glu 150	Glu	Gly	Arg	Leu	Cys 155	Gly	Gln	Arg	Ser	Ser 160
Asn	Asn	Pro	His	Ser 165	Pro	Ile	Val	Glu	Glu 170	Phe	Gln	Val	Pro	Туг 175	Asn
Lys	Leu	Gln	Val 180	Ile	Phe	Lys	Ser	Asp 185	Phe	Ser	Asn	Glu	Glu 190	Arg	Phe
Thr	Gly	Phe 195	Ala	Ala	Tyr	Tyr	Val 200	Ala	Thr	Asp	Ile	Asn 205	Glu	Суз	Thr

Asp	Phe 210	Val	Asp	Val	Pro	Cys 215	Ser	His	Phe	Cys	Asn 220	Asn	Phe	Ile	Gly
Gly 225	Tyr	Phe	Суз	Ser	Cys 230	Pro	Pro	Glu	Tyr	Phe 235	Leu	His	Asp	Asp	Met 240
Lys	Asn	Cys	Gly	Val 245	Asn	Cys	Ser	Gly	Asp 250	Val	Phe	Thr	Ala	Leu 255	Ile
Gly	Glu	Ile	Ala 260	Ser	Pro	Asn	Tyr	Pro 265	Lys	Pro	Tyr	Pro	Glu 270	Asn	Ser
Arg	Суз	Glu 275	Tyr	Gln	Ile	Arg	Leu 280	Glu	Lys	Gly	Phe	Gln 285	Val	Val	Val
Thr	Leu 290	Arg	Arg	Glu	Asp	Phe 295	Asp	Val	Glu	Ala	Ala 300		Ser	Ala	Gly
Asn 305	Cys	Leu	Asp	Ser	Leu 310	Val	Phe	Val	Ala	Gly 315	Asp	Arg	Gln	Phe	Gly 320
Pro	Tyr	Cys	Gly	His 325	Gly	Phe	Pro	Gly	Xaa 330	Leu	Asn	Ile	Glu	Thr 335	Lys
Ser	Asn	Ala	Leu 340	Asp	Ile	Ile	Phe	Gln 345	Thr	Asp	Leu	Thr	Gly 350	Gln	Lys
Lys	Gly	Trp 355	Lys	Leu	Arg	Tyr	His 360	Gly	Asp	Pro	Met	Pro 365	Cys	Pro	Lys
Glu	Asp 370	Thr	Pro	Asn	Ser	Val 375	Trp	Glu	Pro	Ala	Lys 380	Ala	Lys	Tyr	Val
Phe 385	Arg	Asp	Val	Val	Gln 390	Ile	Thr	Сув	Leu	Asp 395	Gly	Phe	Glu	Val	Val 400
Glu	Gly	Arg	Val	Gly 405	Ala	Thr	Ser	Phe	Tyr 410	Ser	Thr	Cys	Gln	Ser 415	Asn
Gly	Lys	Trp	Ser 420	Asn	Ser	Lys	Leu	Lys 425	Cys	Gln	Pro	Val	Asp 430	Cys	Gly
Ile	Pro	Glu 435	Ser	Ile	Glu	Asn	Gly 440	Lys	Val	Glu	Asp	Pro 445	Glu	Ser	Thr
Leu	Phe 450	Gly	Ser	Val	Ile	Arg 455	Tyr	Thr	Cys	Glu	Glu 460	Pro	Tyr	Tyr	Tyr
Met 465	Glu	Asn	Gly	Gly	Gly 470	Gly	Glu	Tyr	His	Cys 475	Ala	Gly	Asn	Gly	Ser 480

Trp	Val	Asn	Glu	Val 485	Leu	Gly	Pro	Glu	Leu 490	Pro	Lys	Cys	Val	Pro 495	Val
Cys	Gly	Val	Pro 500	Arg	Glu	Pro	Phe	Glu 505	Glu	Lys	Gln	Arg	Ile 510	Ile	Gly
Gly	Ser	Asp 515	Ala	Asp	Ile	Lys	Asn 520	Phe	Pro	Trp	Gln	Val 525	Phe	Phe	Asp
Asn	Pro 530	Trp	Ala	Gly	Gly	Ala 535	Leu	Ile	Asn	Glu	Tyr 540	Trp	Val	Leu	Thr
Ala 545	Ala	His	Val	Val	Glu 550	Gly	Asn	Arg	Glu	Pro 555	Thr	Met	Tyr	Val	Gly 560
Ser	Thr	Ser	Val	Gln 565	Thr	Ser	Arg	Leu	Ala 570	Lys	Ser	Lys	Met	Leu 575	Thr
			580		Ile			585	_	-			590		
	_	595			Phe	•	600	_				605	Ī		_
	610				Gly	615					620				
625					Asn 630					635					640
_	_	_		645		-			650					655	
			660		Ala			665	_	-	•		670	-	
		675			Asp		680					685			
	690				Glu	695	_				700			_	•
705					Val 710					715					720
		-		725	Ser	_	_		730	-			-	735	
TYT	THE	Arg	740	тÀа	Asn	TAL	AGT	745	пр	TTE	met	пĀг	750	net	GIN

Glu Asn Ser Thr Pro Arg Glu Asp 755 760

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Pro Arg Lys Thr Leu Thr Pro Glu Pro Ala Pro Ser Leu Ser Arg Pro

155

160

Gly Pro Ala Ala Cys Glu His Pro His Gln Ala Ala Gln Thr Cys Gly Ala Trp Ser Ser Gly Cys Arg Gly Met Leu Arg Ser Trp Ala Met 185 Arg Pro Ser Gly Ser Lys Ser Cys Ala Gly Ser Arg Pro Gly Ser Glu 200 Arg Asp Arg His Ala Cys Arg His 210 215 <210> 1026 <211> 604 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (303) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (359) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1026 Gly Thr Ser Ser Asp Ile Leu Lys Gly Asn Phe Ser Ile Arg Thr Ala Lys Met Gln Gln His Val Cys Glu Thr Ile Ile Arg Ile Phe Lys Arg His Gly Ala Val Gln Leu Cys Thr Pro Leu Leu Leu Pro Arg Asn Arg 35 40 Gln Ile Tyr Glu His Asn Glu Ala Ala Leu Phe Met Asp His Ser Gly 55 Met Leu Val Met Leu Pro Phe Asp Leu Arg Ile Pro Phe Ala Arg Tyr 70 75 Val Ala Arg Asn Asn Ile Leu Asn Leu Lys Arg Tyr Cys Ile Glu Arg 85

Val Phe Arg Pro Arg Lys Leu Asp Arg Phe His Pro Lys Glu Leu Leu

105

110

Glu	Cys	Ala 115	Phe	Asp	Ile	Val	120	Ser	Thr	Thr	Asn	Ser 125	Phe	Leu	Pro
Thr	Ala 130	Glu	Ile	Ile	туг	Thr 135	Ile	Tyr	Glu	Ile	Ile 140	Gln	Glu	Phe	Pro
Ala 145	Leu	Gln	Glu	Arg	Asn 150	Tyr	Ser	Ile	Tyr	Leu 155	Asn	His	Thr	Met	Leu 160
Leu	Lys	Ala	Ile	Leu 165	Leu	His	Cys	Gly	Ile 170	Pro	Glu	Asp	Lys	Leu 175	Ser
Gln	Val	Tyr	Ile 180	Ile	Leu	Tyr	Asp	Ala 185	Val	Thr	Glu	Lys	Leu 190	Thr	Arg
Arg	Glu	Val 195	Glu	Ala	Lys	Phe	Cys 200	Asn	Leu	Ser	Leu	Ser 205	Ser	Asn	Ser
	210	Arg		-	-	215					220				
225		Pro			230					235					240
		Val		245					250					255	
		Lys	260					265					270		
	_	Lys 275					280					285			
	290	Lys		_		295					300				
305		туг			310					315					320
		Val		325					330					335	
		Ala	340					345					350		
_		1eu 355					360					365			
Asn	Leu 370	Thr	Gln	Lys	Leu	Trp 375	Thr	Ala	Gly	Ile	Thr 380	Ala	GIu	ITE	Met

Tyr 385	Asp	Trp	Ser	Gln	Ser 390	Gln	Glu	Glu	Leu	Gln 395	Glu	Tyr	Суз	Arg	His 400
His	Glu	Ile	Thr	Tyr 405	Val	Ala	Leu	Val	Ser 410	Asp	Lys	Glu	Gly	Ser 415	His
Val	Lys	Val	Lys 420	Ser	Phe	Glu	Lys	Glu 425	Arg	Gln	Thr	Glu	Lys 430	Arg	Val
Leu	Glu	Thr 435	Glu	Leu	Val	Asp	His 440	Val	Leu	Gln	Lys	Leu 445	Arg	Thr	Lys
Val	Thr 450	Asp	Glu	Arg	Asn	Gly 455	Arg	Glu	Ala	Ser	Asp 460	Asn	Leu	Ala	Val
Gln 465	Asn	Leu	Lys	Gly	Ser 470	Phe	Ser	Asn	Ala	Ser 475	Gly	Leu	Phe	Glu	Ile 480
His	Gly	Ala	Thr	Val 485	Val	Pro	Ile	Val	Ser 490	Val	Leu	Ala	Pro	Glu 495	Lys
Leu	Ser	Ala	Ser 500	Thr	Arg	Arg	Arg	Tyr 505	Glu	Thr	Gln	Val	Gln 510	Thr	Arg
Leu	Gln	Thr 515	Ser	Leu	Ala	Asn	Leu 520	His	Gln	Lys	Ser	Ser 525	Glu	Ile	Glu
Ile	Leu 530	Ala	Val	Asp	Leu	Pro 535	Lys	Glu	Thr	Ile	Leu 540	Gln	Phe	Leu	Ser
Leu 545	Glu	Trp	Asp		Asp 550	Glu	Gln	Ala	Phe	Asn 555	Thr	Thr	Val	Lys	Gln 560
Leu	Leu	Ser	Arg	Leu 565	Pro	Lys	Gln	Arg	Туг 570	Leu	Lys	Leu	Val	Cys 575	Asp
Glu	Ile	Tyr	Asn 580	Ile	Lys	Val	Glu	Lys 585	Lys	Val	Ser	Val	Leu 590	Phe	Leu
Tyr	Ser	Tyr 595	Arg	Asp	Asp	Tyr	Tyr 600	Arg	Ile	Leu	Phe				

<210> 1027

<211> 459

<212> PRT

<213> Homo sapiens

<220>

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-10)> 1(127													
			Gly	Ile 5	Asn	Thr	Lys	Phe	Thr 10	Ser	Lys	Glu	Pro	Ile 15	Phe
Leu	Thr	Gln	Leu 20	Leu	His	Phe	Ser	Asn 25	Leu	Xaa	Gln	Glu	Tyr 30	Lys	Ile
Asn	Ser	Arg 35	Leu	Leu	Gln	Asn	Ile 40	Leu	Asp	Ala	Gly	Phe 45	Gln	Met	Pro
Thr	Pro 50	Ile	Gln	Met	Gln	Ala 55	Ile	Pro	Val	Met	Leu 60	His	Gly	Arg	Glu
Leu 65	Leu	Ala	Ser	Ala	Pro 70	Thr	Gly	Ser	Gly	Lys 75	Thr	Leu	Ala	Phe	Ser 80
Ile	Pro	Ile	Leu	Met 85	Gln	Leu	Lys	Gln	Pro 90	Ala	Asn	Lys	Gly	Phe 95	Arg
Ala	Leu	Ile	Ile 100	Ser	Pro	Thr	Arg	Glu 105	Leu	Ala	Ser	Gln	Ile 110	His	Arg
Glu	Leu	Ile 115	Lys	Ile	Ser	Glu	Gly 120	Thr	Gly	Phe	Arg	Ile 125	His	Met	Ile
His	Lys 130	Ala	Ala	Val	Ala	Ala 135	Lys	Lys	Phe	Gly	Pro 140	Lys	ser	Ser	Lys
Lys 145	Phe	Asp	Ile	Leu	Val 150	Thr	Thr	Pro	Asn	Arg 155	Leu	Ile	Tyr	Leu	Leu 160
Lys	Gln	Asp	Pro	Pro 165	Gly	Ile	Asp	Leu	Ala 170	Ser	Val	Glu	Trp	Leu 175	Val
Val	Asp	Glu	ser 180	Asp	Lys	Leu	Phe	Glu 185	Asp	Gly	Lys	Thr	Gly 190	Phe	Arg
Asp	Gln	Leu 195	Ala	Ser	Ile	Phe	Leu 200	Ala	Суз	Thr	Ser	His 205	Lys	Val	Arg
Arg	Ala 210	Met	Phe	Ser	Ala	Thr 215	Phe	Ala	Tyr	Asp	Val 220	Glu	Gln	Trp	Cys
Lys 225	Leu	Asn	Leu	Asp	Asn 230	Val	Ile	Ser	Val	Ser 235	Ile	Gly	Ala	Arg	Asn 240
Ser	Ala	Val	Glu	Thr	Val	Glu	Gln	Glu	Leu	Leu	Phe	Val	Glv	Ser	Glu

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1005

250 255 245 Thr Gly Lys Leu Leu Ala Val Arg Glu Leu Val Lys Lys Gly Phe Asn Pro Pro Val Leu Val Phe Val Gln Ser Ile Glu Arg Ala Lys Glu Leu 280 Phe His Glu Leu Ile Tyr Glu Gly Ile Asn Val Asp Val Ile His Ala 295 Glu Arg Thr Gln Gln Gln Arg Asp Asn Thr Val His Ser Phe Arg Ala 310 315 Gly Lys Ile Trp Val Leu Ile Cys Thr Ala Leu Leu Ala Arg Gly Ile 325 Asp Phe Lys Gly Val Asn Leu Val Ile Asn Tyr Asp Phe Pro Thr Ser Ser Val Glu Tyr Ile His Arg Ile Gly Arg Thr Gly Arg Ala Gly Asn 360 Lys Gly Lys Ala Ile Thr Phe Phe Thr Glu Asp Asp Lys Pro Leu Leu Arg Ser Val Ala Asn Val Ile Gln Gln Ala Gly Cys Pro Val Pro Glu 390 395 Tyr Ile Lys Gly Phe Gln Lys Leu Leu Ser Lys Gln Lys Lys Met 405 Ile Lys Lys Pro Leu Glu Arg Glu Ser Ile Ser Thr Thr Pro Lys Cys 425 Phe Leu Glu Lys Ala Lys Asp Lys Gln Lys Lys Val Thr Gly Gln Asn 440 Ser Lys Lys Val Ala Leu Glu Asp Lys Ser 450 <210> 1028

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1 5 10 15

<211> 68 <212> PRT

<213> Homo sapiens

Arg Val Thr Ser Ala Ser Ser Leu Ala Ser Phe Leu Val Leu Glu Arg Leu Thr Asn Val Cys His Ser His Lys Cys Phe Glu Leu Asp Leu Cys Asp Leu Cys Phe Phe Ser Phe Ser Leu Glu Ser Glu Tyr His Cys Leu Pro Pro Arg Ser <210> 1029 <211> 215 <212> PRT <213> Homo sapiens <400> 1029 Tyr Pro Leu Thr Pro Ala Pro Ala Pro His Asp Pro Ser Pro Arg Ala 10 His Gly Arg Gly Asp Asp Val Thr Gln Ala Thr Ala Leu Thr Ser His Ile Thr Val Val Met Ala Ser Arg Gly His Val Asp Val Thr Lys Arg 40 Tyr Ser Asp Gly Val Val Gln Met Gln His Val Ala His Arq His Gly Glu Leu Gly Met Thr Ser His Arg Asp Ala Ala Thr Thr Ser Arg Ala 70 Met Ser Thr Ser His Ile Leu Met Ser His Arg Arg Gly Asp Gly Ile 85 90 Thr Gln Thr Val Met Met Ser His Thr Asp Thr Val Thr Thr His Thr 105 Met Thr Thr Pro Ile Asp Met Ala Pro Thr Ser His Ala Arg Met 115 120 Pro Phe His Thr His Phe Leu Pro Asn Ser His Leu Val Ser Arg Ser 135

Pro Asp Pro Gly Thr Arg Ala Lys Val Pro Thr Gly Ser His Pro Leu

Pro His Ser Pro Gly Pro Gln His Leu Pro Ser Ser Phe Leu Ala 165 170 175

Ser Gln Pro Leu Pro His Pro Gln Cys Leu Asp Pro Glu Val Arg Thr 180 185 190

Gly Ser His Ser Pro Pro Leu Leu Glu Arg Glu Cys Phe Gln Asp Pro 195 200 205

Leu Gly Ala Leu Ser Arg Gly 210 215

<210> 1030

<211> 297

<212> PRT

<213> Homo sapiens

<400> 1030

Lys Val Arg Leu Gln Val Pro Val Arg Asn Ser Arg Val Asp Pro Arg 1 5 10 15

Val Arg Pro Arg Val Arg Pro Arg Val Arg Trp Thr Ala Ala Met Arg
20 25 30

Leu Thr Val Leu Cys Ala Val Cys Leu Leu Pro Gly Ser Leu Ala Leu 35 40 45

Pro Leu Pro Gln Glu Ala Gly Gly Met Ser Glu Leu Gln Trp Glu Gln 50 55 60

Ala Gln Asp Tyr Leu Lys Arg Phe Tyr Leu Tyr Asp Ser Glu Thr Lys 65 70 75 80

Asn Ala Asn Ser Leu Glu Ala Lys Leu Lys Glu Met Gln Lys Phe Phe 85 90 95

Gly Leu Pro Ile Thr Gly Met Leu Asn Ser Arg Val Ile Glu Ile Met 100 105 110

Gln Lys Pro Arg Cys Gly Val Pro Asp Val Ala Glu Tyr Ser Leu Phe 115 120 125

Pro Asn Ser Pro Lys Trp Thr Ser Lys Val Val Thr Tyr Arg Ile Val 130 135 140

Ser Tyr Thr Arg Asp Leu Pro His Ile Thr Val Asp Arg Leu Val Ser 145 150 155 160

Lys Ala Leu Asn Met Trp Gly Lys Glu Ile Pro Leu His Phe Arg Lys

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1008

165 170 175 Val Val Trp Gly Thr Ala Asp Ile Met Ile Gly Phe Ala Arg Gly Ala 185 His Gly Asp Ser Tyr Pro Phe Asp Gly Pro Gly Asn Thr Leu Ala His 200 195 Ala Phe Ala Pro Gly Thr Gly Leu Gly Gly Asp Ala His Phe Asp Glu Asp Glu Arg Trp Thr Asp Gly Ser Ser Leu Gly Ile Asn Phe Leu Tyr 230 Ala Ala Thr His Glu Leu Gly His Ser Leu Gly Met Gly His Ser Ser 245 Asp Pro Asn Ala Val Met Tyr Pro Thr Tyr Gly Asn Gly Asp Pro Gln 265 Asn Phe Lys Leu Ser Gln Asp Asp Ile Lys Gly Ile Gln Lys Leu Tyr 275 280 Gly Lys Arg Ser Asn Ser Arg Lys Lys 290 295 <210> 1031 <211> 571 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (44) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (81) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (484) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1031 Arg Val Arg Ser Lys Val Pro Arg Cys Val Asn Thr Gln Pro Gly Phe 1 10

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Val	Gly	Leu 35	Glu	Ala	Ala	Lys	Thr 40	Glu	Lys	Gln	Xaa	Cys 45	Glu	Pro	Glu
Asn	Pro 50	Cys	Lys	Asp	Lys	Thr 55	His	Asn	Суз	His	Lys 60	His	Ala	Glu	Суз
11e 65	Tyr	Leu	Gly	His	Phe 70	Ser	Asp	Pro	Met	Tyr 75	Lys	Cys	Glu	Суз	Gln 80
Xaa	Gly	Tyr	Ala	Gly 85	Asp	Gly	Leu	Ile	Суs 90	Gly	Glu	Asp	Ser	Asp 95	Leu
Ąsp	Gly	Trp	Pro 100	Asn	Leu	Asn	Leu	Val 105	Cys	Ala	Thr	Asn	Ala 110	Thr	Туг
His	Суз	Ile 115	Lys	Asp	Asn	Cys	Pro 120	His	Leu	Pro	Asn	Ser 125	Gly	Gln	Glu
Asp	Phe 130	Asp	Lys	Asp	Gly	Ile 135	Gly	Asp	Ala	Суз	Asp 140	Asp	Asp	Asp	Asp
145					Asp 150					155					160
				165	Tyr				170					175	
Asn	Cys	Pro	Tyr 180	Val	His	Asn	Pro	Ala 185	Gln	Ile	Asp	Thr	Asp 190	Asn	Asn
		195			Cys		200					205			
	210				Cys	215					220				
225					Val 230					235		_			240
				245	Thr				250					255	
			260		Asp			265					270		
Ąsp	Asn	Cys 275	Pro	Tyr	Ile	Ser	Asn 280	Ala	Asn	Gln	Ala	Asp 285	His	Asp	Arg

ASP	290	GIII	GIY	ASP	Ala	295	изр	PIO	vaħ	vaħ	300	NSII	vəħ	Gly	Val
Pro 305	Asp	Asp	Arg	Asp	Asn 310	Cys	Arg	Leu	Val	Phe 315	Asn	Pro	Asp	Gln	Glu 320
Asp	Leu	Asp	Gly	Asp 325	Gly	Arg	Gly	Asp	11e 330	Сув	Lys	Asp	Asp	Phe 335	Asp
Asn	Asp	Asn	Ile 340	Pro	Asp	Ile	Asp	Asp 345	Val	Суз	Pro	Glu	Asn 350	Asn	Ala
Ile	Ser	Glu 355	Thr	Asp	Phe	Arg	Asn 360	Phe	Gln	Met	Val	Pro 365	Leu	Asp	Pro
Lys	Gly 370	Thr	Thr	Gln	Ile	Asp 375	Pro	Asn	Trp	Val	11e 380	Arg	His	Gln	Gly
Lys 385	Glu	Leu	Val	Gln	Thr 390	Ala	Asn	Ser		Pro 395	Gly	Ile	Ala	Val	Gly 400
Phe	Asp	Glu	Phe	Gly 405	Ser	Val	Asp	Phe	Ser 410	Gly	Thr	Phe	Tyr	Val 415	Asn
Thr	Asp	Arg	Asp 420	Asp	Asp	Tyr	Ala	Gly 425	Phe	Val	Phe	Gly	Tyr 430	Gln	Ser
Ser	Ser	Arg 435	Phe	Tyr	Val	Val	Met 440	Trp	Lys	Gln	Val	Thr 445	Gln	Thr	Tyr
-	450	_				455					Ser 460	_			
Lys 465	Val	Val	Asn	Ser	Thr 470	Thr	Gly	Thr	Gly	Glu 475	His	Leu	Arg	Asn	Ala 480
Leu	Trp	His	Xaa	Gly 485	Asn	Thr	Pro	Gly	Gln 490	Val	Arg	Thr	Leu	Trp 495	His
			500		_	_	-	505	-		Ala	_	510		
Leu	Thr	His 515	Arg	Pro	Lys	Thr	Gly 520	Tyr	Ile	Arg	Val	Leu 525	Val	His	Glu
Gly	Lys 530	Gln	Val	Met	Ala	Asp 535	Ser	Gly	Pro	Ile	Tyr 540	Asp	Gln	Thr	Tyr
Ala 545	Gly	Gly	Arg	Leu	Gly 550	Leu	Phe	Val	Phe	Ser 555	Gln	Glu	Met	Val	Туг 560

Phe Ser Asp Leu Lys Tyr Glu Cys Arg Asp Ile 565 570

<210> 1032

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1032

Gly Arg Gly Thr Ala Thr Phe Pro Thr Gly His Glu Phe Val Gly Pro
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Cys Leu Gly Arg Ala Glu Ala Phe Trp Arg Ser Lys Met Gly Arg Lys
20 25 30

Asp Ala Ala Thr Ile Lys Leu Pro Val Asp Gln Tyr Arg Lys Gln Ile 35 40 45

Gly Lys Gln Asp Tyr Lys Lys Thr Lys Pro Ile Leu Arg Ala Thr Lys 50 55 60

Leu Lys Ala Glu Ala Lys Lys Thr Ala Ile Gly Ile Lys Glu Val Gly 65 70 75 80

Leu Val Leu Ala Ala Ile Leu Ala Leu Leu Leu Ala Phe Tyr Ala Phe 85 90 95

Phe Tyr Leu Arg Leu Thr Thr Asp Val Asp Pro Asp Leu Asp Gln Asp 100 105 110

Glu Asp

<210> 1033

<211> 243

<212> PRT

<213> Homo sapiens

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<222> (88)

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<220>

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<222> (101)

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<40	0> 10	033													
His 1	Arg	Arg	Asp	Glu 5	Ala	Leu	Gln	Ser	Leu 10	Arg	Phe	Arg	Arg	Arg 15	Pro
Gly	Ala	Gln	Ala 20	Ala	Asp	Ala	Cys	Gly 25	Pro	Arg	Ala	Asp	Leu 30	Gly	Gly
Pro	Arg	Glu 35	Pro	Ala	Ala	Gly	Gly 40	Arg	Ala	Ala	Trp	His 45	Arg	Pro	Ala
Ala	Arg 50	Gly	Gln	Ser	Pro	Arg 55	Arg	Cys	His	Ala	Gly 60	Val	His	Arg	Ser
Gln 65	Суѕ	His	Leu	Cys	Arg 70	Leu	Gly	Ala	Ala	Glu 75	Arg	Phe	Arg	Gly	Ile 80
Val	Ala	Leu	Leu	Ala 85	Ser	Arg	Xaa	Leu	Leu 90	Arg	Pro	Pro	Leu	His 95	Trp
Val	Leu	Leu	Ala 100	Xaa	Ala	Leu	Val	Asn 105	Leu	Leu	Leu	Ser	Val 110	Ala	Суз
Ser	Leu	Gly 115	Leu	Leu	Leu	Ala	Val 120	Ser	Leu	Thr	Val	Ala 125	Asn	Gly	Gly
Arg	Arg 130	Leu	Ile	Ala	Asp	Cys 135	His	Pro	Gly	Leu	Leu 140	Asp	Pro	Leu	Val
Pro 145	Leu	Asp	Glu	Gly	Pro 150	Gly	His	Thr	Asp	Cys 155	Pro	Phe	Asp	Pro	Thr 160
Arg	Ile	туг	Asp	Thr 165	Ala	Leu	Ala	Leu	Trp 170	Ile	Pro	Ser	Leu	Leu 175	Met
Ser	Ala	Gly	Glu 180	Ala	Ala	Leu	ser	Gly 185	туг	Суѕ	Cys	Val	Ala 190	Ala	Leu
Thr	Leu	Arg 195	Gly	Val	Gly	Pro	Cys 200	Arg	Lys	Asp	Gly	Leu 205	Gln	Gly	Gln
Leu	Glu 210	Glu	Met	Thr	Glu	Leu 215	Glu	Ser	Pro	Lys	Cys 220	Lys	Arg	Gln	Glu
Asn 225	Glu	Gln	Leu	Leu	Asp 230	Gln	Asn	Gln	Glu	Ile 235	Arg	Ala	Ser	Gln	Arg 240
Ser	Trp	Val													

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Leu Val Lys Ser Phe Ser Lys Ala Ser Phe Cys Ile Phe Ile Thr Lys
115 120 125

Gln Arg Lys Ser Ser Glu Asp Leu Ala Leu Lys Gln Ile Cys Ala Asn 130 135 140

Thr Ala Arg Val Ile Leu Lys Leu Lys His Phe His Phe Val Ser Tyr 145 150 155 160

Met Cys Thr Phe Leu Phe Thr Cys Glu Asn Gly His Leu 165 170

<210> 1035

<211> 241

<212> PRT

<213> Homo sapiens

<400> 1035

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Pne	Thr	Pne	20	hue	Leu	Pue	тгр	25	Cys	GIĀ	iie	ren	30	Leu	Alá
Leu	Ala	Ile 35	Trp	Val	Arg	Val	Ser 40	Asn	Asp	Ser	Gln	Ala 45	Ile	Phe	Gly
Ser	Glu 50	Asp	Val	Gly	Ser	Ser 55	Ser	Туг	Val	Ala	Val 60	Asp	Ile	Leu	Ile
Ala 65	Val	Gly	Ala	Ile	Ile 70	Met	Ile	Leu	Gly	Phe 75	Leu	Gly	Cys	Суз	G1 ₃
Ala	Ile	Lys	Glu	Ser 85	Arg	Cys	Met	Leu	Leu 90	Leu	Phe	Phe	Ile	Gly 95	Leu
Leu	Leu	Ile	Leu 100	Leu	Leu	Gln	Val	Ala 105	Thr	Gly	Ile	Leu	Gly 110	Ala	Va]
Phe	Lys	Ser 115	Lys	Ser	Asp	Arg	11e 120	Val	Asn	Glu	Thr	Leu 125	Tyr	Glu	Ası
Thr	Lys 130	Leu	Leu	Ser	Ala	Thr 135	Gly	Glu	Ser	Glu	Lys 140	Gln	Phe	Gln	Glu
Ala 145	Ile	Ile	Val	Phe	Gln 150	Glu	Glu	Phe	Lys	Cys 155	Суз	Gly	Leu	Val	Asr 160
Gly	Ala	Ala	Asp	Trp 165	Gly	Asn	Asn	Phe	Gln 170	His	Tyr	Pro	Glu	Leu 175	Суз
Ala	Cys	Leu	Asp 180	Lys	Gln	Arg	Pro	Cys 185	Gln	Ser	Tyr	Asn	Gly 190	Lys	Glr
Val	Tyr	Lys 195	Glu	Thr	Суз	Ile	Ser 200	Phe	Ile	Lys	Asp	Phe 205	Leu	Ala	Lys
	210					215				-	220		Val		
Ile 225	Leu	Gly	Leu	Val	Phe 230	Ser	Met	Val	Leu	Tyr 235	Cys	Gln	Ile	Gly	Asn 240

<210> 1036

<211> 335

Lys

<212> PRT

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<22	20>														
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	2> (1		=				1		.	. .			
~22	.J- A	ida t	equa1	.s an	y or	tne	пас	uraı	TÀ C	ccur	ring	L-a	mīno	acı	as
<40	0> 1	036													
		Xaa	Gly			Glu	Glu	Ala			Ala	Ala	Ala	Ala	Ala
1				5					10					15	
Ser	Leu	Arg	Gly	Val	Val	Leu	Gly	Pro	Arq	Glv	Ala	Glv	Leu	Pro	Gly
	•	_	20				•	25		•			30		3
21-				0 3		_		_		_	_			_	
AIG	Arg	35		GIY	Leu	Leu	Cys 40	ser	Ala	Arg	Pro	GLY 45	Gln	Leu	Pro
												7.5			
Leu			Pro	Gln	Ala		Ala	Leu	Ser	Ser		Ser	Gly	Leu	Ser
	50					55					60				
Arg	Gly	Arg	Lys	Val	Met	Leu	Ser	Ala	Leu	Gly	Met	Leu	Ala	Ala	Gly
65					70					75					80
Gl ₁₁	717	C1		21-	77 n 3	21-	*	*** -			••- 1				
GLY	ALG	GIY	Leu	85	val	Ala	reu	HIS	ser 90	Ala	vaı	ser	Ala	ser 95	Asp
														,,,	
Leu	Glu	Leu	His	Pro	Pro	Ser	Tyr		Trp	Ser	His	Arg		Leu	Leu
			100					105					110		
Ser	Ser	Leu	Asp	His	Thr	Ser	Ile	Arg	Arg	Gly	Phe	Gln	Val	Tyr	Lys
		115					120					125		-	•
Cla	170 1	C	21-	C	G	rr : _	C	14- 4		5 5.0	••- •		_		
GIII	130	Cys	Ala	ser	.cys	135	ser	met	Asp	Pne	140	Ala	туг	Arg	HIS
	Val	Gly	Val	Cys		Thr	Glu	Asp	Glu		Lys	Glu	Leu	Ala	
145					150					155					160
Glu	Val	Glu	Val	Gln	Asp	Gly	Pro	Asn	Glu	Asp	Gly	Glu	Met	Phe	Met
				165					170		_			175	
Ara	Pro	Gl.,	Lys	T 0.11	Dho	3.00		Dho	7	T	D		D	•	
g	110	GLY	180	nea	FIIC	vaħ	TYL	185	PIG	гуз	PIO	туг	190	ASN	ser
Glu	Ala		Arg	Ala	Ala	Asn		Gly	Ala	Leu	Pro		Asp	Leu	Ser
		195					200					205			
Tyr	Ile	Val	Arg	Ala	Arg	His	Gly	Gly	Glu	Asp	Tyr	Val	Phe	Ser	Leu
	210					215					220				
T.en	ም ኮ ~	G1v	Tyr	Cue	Gl v	Dro	Dre	mb-	C1	t7-1	Cor	7	3	61	~ 1
Leu	TIIT	GIY	TAT	Cys	JIU	FIO	FIO	TIIT	grå	AGT	SEL	nen	vr.d	GIR	GTÅ

					230					235					240
Leu	Tyr	Phe	Asn	Pro 245	Tyr	Phe	Pro	Gly	Gln 250	Ala	Ile	Ala	Met	Ala 255	Pro
Pro	Ile	Tyr	Thr 260	Asp	Val	Leu	Glu	Phe 265	Asp	Asp	Gly	Thr	Pro 270	Ala	Thr
Met	Ser	Gln 275	Ile	Ala	Lys	Asp	Val 280	Cys	Thr	Phe	Leu	Arg 285	Trp	Ala	Ser
Glu	Pro 290	Glu	His	Asp	His	Arg 295	Lys	Arg	Met ,	Gly	Leu 300	Lys	Met	Leu	Met
Met 305	Met	Ala	Leu	Leu	Val 310	Pro	Leu	Val	Tyr	Thr 315	Ile	Lys	Arg	His	Lys 320
Trp	Ser	Val	Leu	Lys 325	Ser	Arg	Lys	Leu	Ala 330	Tyr	Arg	Pro	Pro	Lys 335	
	> 10														
	l> 51 ?> PF														
<213	3> Hc	omo s	sapie	ens											
-															
)> 10														
<400		37	-		Pro	Leu	Pro	Leu	Arg 10	Ala	Leu	Pro	Trp	His 15	Ser
<400 His 1	Gln)37 Leu	Gln	Gly 5					10				_		
<400 His 1 Ser	Gln)37 Leu Ser	Gln Arg 20	Gly 5 Val	Thr	Суз	Thr	Arg 25	10 Cys	Phe	Ser	Trp	Met 30	15	Pro
<400 His 1 Ser	Gln Arg Pro)37 Leu Ser Met	Gln Arg 20 His	Gly 5 Val Pro	Thr	Cys Arg	Thr Ala 40	Arg 25 Gly	10 Cys Ser	Phe Lys	Ser Ser	Trp Gln 45	Met 30	15 His Ser	Pro Arg
<400 His 1 Ser	Gln Arg Pro Pro 50	Ser Met 35	Gln Arg 20 His	Gly 5 Val Pro Ser	Thr Leu Pro	Cys Arg Met 55	Thr Ala 40 Arg	Arg 25 Gly Ala	10 Cys Ser Ala	Phe Lys Asn	Ser Ser Arg 60	Trp Gln 45 Ser	Met 30 Gly	15 His Ser	Pro Arg Ala
<400 His 1 Ser Ser	Gln Arg Pro Pro 50 Arg	Ser Met 35 Ala	Gln Arg 20 His Pro	Gly 5 Val Pro Ser	Thr Leu Pro Arg 70	Cys Arg Met 55	Thr Ala 40 Arg	Arg 25 Gly Ala Gly	10 Cys Ser Ala Lys	Phe Lys Asn Ser 75	Ser Ser Arg 60 Ser	Trp Gln 45 Ser	Met 30 Gly His	15 His Ser Ser	Pro Arg Ala Gln 80
<400 His 1 Ser Ser Gly 65	Gln Arg Pro 50 Arg	Ser Met 35 Ala Thr	Gln Arg 20 His Pro	Gly 5 Val Pro Ser Gly Lys 85	Thr Leu Pro Arg 70 Pro	Cys Arg Met 55 Thr	Thr Ala 40 Arg Pro	Arg 25 Gly Ala Gly	10 Cys Ser Ala Lys Arg 90	Phe Lys Asn Ser 75	Ser Ser Arg 60 Ser	Trp Gln 45 Ser Fro	Met 30 Gly His Lys	15 His Ser Val Arg 95	Pro Arg Ala Gln 80 Ser

Ala	Leu 130	Asn	Leu	Asn	Gly	Phe 135	Asp	Val	Glu	Glu	Ala 140	Lys	Ile	Leu	Arg
Leu 145	Ser	Gly	Lys	Pro	Gln 150	Asn	Ala	Pro	Glu	Gly 155	Tyr	Gln	Asn	Arg	Leu 160
Lys	Val	Leu	Tyr	Ser 165	Gln	Lys	Ala	Thr	Pro 170	Gly	Ser	Ser	Arg	Lys 175	Thr
Суз	Arg	Tyr	Ile 180	Pro	Ser	Leu	Pro	Asp 185	Arg	Ile	Leu	Asp	Ala 190	Pro	Glu
Ile	Arg	Asn 195	Asp	Tyr	Tyr	Leu	Asn 200	Leu	Val	Asp	Trp	Ser 205	Ser	Gly	Asn
Val	Leu 210	Ala	Val	Ala	Leu	Asp 215	Asn	Ser	Val	Tyr	Leu 220	Trp	Ser	Ala	Ser
Ser 225	Gly	Asp	Ile	Leu	Gln 230	Leu	Leu	Gln	Met	Glu 235	Gln	Pro	Gly	Glu	Tyr 240
Ile	Ser	Ser	Val	Ala 245	Trp	Ile	Lys	Glu	Gly 250	Asn	Tyr	Leu	Ala	Val 255	Gly
Thr	Ser	Ser	Ala 260	Glu	Val	Gln	Leu	Trp 265	Asp	Val	Gln	Gln	Gln 270	Lys	Arg
Leu	Arg	Asn 275	Met	Thr	Ser	His	Ser 280	Ala	Arg	Val	Gly	Ser 285	Leu	Ser	Trp
Asn	Ser 290	Tyr	Ile	Leu	Ser	Ser 295	Gly	Ser	Arg	Ser	Gly 300	His	Ile	His	His
His 305	Asp	Val	Arg	Val	Ala 310	Glu	His	His	Val	Ala 315	Thr	Leu	Ser	Gly	His 320
Ser	Gln	Glu	Val	Cys 325	Gly	Leu	Arg	Trp	Ala 330	Pro	Asp	Gly	Arg	His 335	Leu
Ala	Ser	Gly	Gly 340	Asn ·	Asp	Asn	Leu	Val 345	Asn	Val	Trp	Pro	Ser 350	Ala	Pro
Gly	Glu	Gly 355	Gly	Trp	Val	Pro	Leu 360	Gln	Thr	Phe	Thr	Gln 365	His	Gln	Gly
Ala	Val 370	Lys	Ala	Val	Ala	Trp 375	Суз	Pro	Trp	Gln	Ser 380	Asn	Val	Leu	Ala
Thr 385	Gly	Gly	Gly	Thr	Ser 390	Asp	Arg	His	Ile	Arg 395	Ile	Trp	Asn	Val	Cys 400

Ser Gly Ala Cys Leu Ser Ala Val Asp Ala His Ser Gln Val Cys Ser 405 410 415

Ile Leu Trp Ser Pro His Tyr Lys Glu Leu Ile Ser Gly His Gly Phe

Ile Leu Trp Ser Pro His Tyr Lys Glu Leu Ile Ser Gly His Gly Phe
420 425 430

Ala Gln Asn Gln Leu Val Ile Trp Lys Tyr Pro Thr Met Ala Lys Val 435 440 445

Ala Glu Leu Lys Gly His Thr Ser Arg Val Leu Ser Leu Thr Met Ser 450 460

Pro Asp Gly Ala Thr Val Ala Ser Ala Ala Ala Asp Glu Thr Leu Arg 465 470 475 480

Leu Trp Arg Cys Phe Glu Leu Asp Pro Ala Arg Arg Arg Glu Arg Glu 485 490 495

Lys Ala Ser Ala Ala Lys Ser Ser Leu Ile His Gln Gly Ile Arg
500 505 510

<210> 1038

<211> 209

<212> PRT

<213> Homo sapiens

<400> 1038

His Glu Pro Pro Ser Ala Ser Ser Val Ala Gly Asp Leu Gly Arg Gly
1 5 10 15

Thr Arg Thr Glu Val Glu Ala Arg Ala Ala Arg Pro Gly Ala Glu Ser 20 25 30

Ala Pro Ala Ala Ala Met Pro Asp Ser Trp Asp Lys Asp Val Tyr Pro 35 40 45

Glu Pro Pro Arg Arg Thr Pro Val Gln Pro Asn Pro Ile Val Tyr Met 50 55 60

Met Lys Ala Phe Asp Leu Ile Val Asp Arg Pro Val Thr Leu Val Arg 65 70 75 80

Glu Phe Ile Glu Arg Gln His Ala Lys Asn Arg Tyr Tyr Tyr His 85 90 95

Arg Gln Tyr Arg Arg Val Pro Asp Ile Thr Glu Cys Lys Glu Glu Asp 100 105 110

1019

Ile Met Cys Met Tyr Glu Ala Glu Met Gln Trp Lys Arg Asp Tyr Lys Val Asp Gln Glu Ile Ile Asn Ile Met Gln Asp Arg Leu Lys Ala Cys Gln Gln Arg Glu Gly Gln Asn Tyr Gln Gln Asn Cys Ile Lys Glu Val Glu Gln Phe Thr Gln Val Ala Lys Ala Tyr Gln Asp Arg Tyr Gln Asp 170 Leu Gly Ala Tyr Ser Ser Ala Arg Lys Cys Leu Ala Lys Gln Arg Gln 180 185 Arg Met Leu Gln Glu Arg Lys Ala Ala Lys Glu Ala Ala Ala Ala Thr 200 Ser <210> 1039 <211> 219 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (153) <223> Xaa equals any of the naturally occurring L-amino acids Leu Ala Ala Pro Asp Leu Ser Lys Pro Arg Gly Tyr His Trp Asp Thr 10 Ser Asp Trp Met Pro Ser Val Pro Leu Pro Asp Ile Gln Glu Phe Pro 25 Asn Tyr Glu Val Ile Asp Glu Gln Thr Pro Leu Tyr Ser Ala Asp Pro Asn Ala Ile Asp Thr Asp Tyr Tyr Pro Gly Gly Tyr Asp Ile Glu Ser Asp Phe Pro Pro Pro Pro Glu Asp Phe Pro Ala Ala Asp Glu Leu Pro

Pro Leu Pro Pro Glu Phe Ser Asn Gln Phe Glu Ser Ile His Pro Pro

85

90

Arg Asp Met Pro Ala Ala Gly Ser Leu Gly Ser Ser Ser Arg Asn Arg 100 105 Gln Arg Phe Asn Leu Asn Gln Tyr Leu Pro Asn Phe Tyr Pro Leu Asp 120 Met Ser Glu Pro Gln Thr Lys Gly Thr Gly Glu Asn Ser Thr Cys Arg Glu Pro His Ala Pro Tyr Pro Pro Xaa Tyr Gln Arg His Phe Glu Ala 150 Pro Ala Val Glu Ser Met Pro Met Ser Val Tyr Ala Ser Thr Ala Ser 165 170 Cys Ser Asp Val Ser Ala Cys Cys Glu Val Glu Ser Glu Val Met Met 180 185 Ser Asp Tyr Glu Ser Gly Asp Asp Gly His Phe Glu Glu Val Thr Ile 200 Pro Pro Leu Asp Ser Gln Gln His Thr Glu Val 210 <210> 1040 <211> 178 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (11) <223> Xaa equals any of the naturally occurring L-amino acids Phe Asp Leu Pro Tyr Arg Ala Glu Phe Gly Xaa Pro Gly Pro Pro Leu

Met Glu Ser Asp Phe Tyr Leu Arg Tyr Tyr Val Gly His Lys Gly Lys 35 40 45

Phe Gly His Glu Phe Leu Glu Phe Glu Phe Arg Pro Asp Gly Lys Leu

Ser Ala Ala Cys Ser Trp Lys Phe Arg Leu Gly Cys Leu Leu Gly Ala

Arg Tyr Ala Asn Asn Ser Asn Tyr Lys Asn Asp Val Met Ile Arg Lys

1021

70 75 65 Glu Ala Tyr Val His Lys Ser Val Met Glu Glu Leu Lys Arg Ile Ile 85 90 Asp Asp Ser Glu Ile Thr Lys Glu Asp Asp Ala Leu Trp Pro Pro Pro 105 Asp Arg Val Gly Arg Gln Glu Leu Glu Ile Val Ile Gly Asp Glu His 120 Ile Ser Phe Thr Thr Ser Lys Ile Gly Ser Leu Ile Asp Val Asn Gln 135 Ser Lys Asp Pro Glu Gly Leu Arg Val Phe Tyr Tyr Leu Val Gln Asp 150 155 Leu Lys Cys Leu Val Phe Ser Leu Ile Gly Leu His Phe Lys Ile Lys 165 170 Pro Ile <210> 1041 <211> 121 <212> PRT <213> Homo sapiens Leu Val Pro Asn Ser Ala Arg Ala Gly Ala Ser Tyr Ala Ala Ala Ala Val Thr Met Ala His Tyr Lys Ala Ala Asp Ser Lys Arg Glu Gln Phe Arg Arg Tyr Leu Glu Lys Ser Gly Val Leu Asp Thr Leu Thr Lys Val 35 40 Leu Val Ala Leu Tyr Glu Glu Pro Glu Lys Pro Asn Ser Ala Leu Asp Phe Leu Lys His His Leu Gly Ala Ala Thr Pro Glu Asn Pro Glu Ile 70 75 Glu Leu Leu Arg Leu Glu Leu Ala Glu Met Lys Glu Lys Tyr Glu Ala 85 Ile Val Glu Glu Asn Lys Lys Leu Lys Ala Lys Leu Ala Gln Tyr Glu 105 100

Pro Pro Gln Glu Glu Lys Arg Ala Glu 115 120

<210> 1042

<211> 253

<212> PRT

<213> Homo sapiens

<400> 1042

Val Asp Pro Arg Val Arg Pro Arg Ser Val Asn Gly Glu Leu Gln Lys

1 10 15

Ala Ile Asp Leu Phe Thr Asp Ala Ile Lys Leu Asn Pro Arg Leu Ala 20 25 30

Ile Leu Tyr Ala Lys Arg Ala Ser Val Phe Val Lys Leu Gln Lys Pro 35 40 45

Asn Ala Ala Ile Arg Asp Cys Asp Arg Ala Ile Glu Ile Asn Pro Asp 50 55 60

Ser Ala Gln Pro Tyr Lys Trp Arg Gly Lys Ala His Arg Leu Leu Gly 65 70 75 80

His Trp Glu Glu Ala Ala His Asp Leu Ala Leu Ala Cys Lys Leu Asp 85 90 95

Tyr Asp Glu Asp Ala Ser Ala Met Leu Lys Glu Val Gln Pro Arg Ala 100 105 110

Gln Lys Ile Ala Glu His Arg Arg Lys Tyr Glu Arg Lys Arg Glu Glu 115 120 125

Arg Glu Ile Lys Glu Arg Ile Glu Arg Val Lys Lys Ala Arg Glu Glu 130 135 140

His Glu Arg Ala Gln Arg Glu Glu Glu Ala Arg Arg Gln Ser Gly Ala 145 150 155 160

Gln Tyr Gly Ser Phe Pro Gly Gly Phe Pro Gly Gly Met Pro Gly Asn 165 170 175

Phe Pro Gly Gly Met Pro Gly Met Gly Gly Met Pro Gly Met Ala 180 185 190

Gly Met Pro Gly Leu Asn Glu Ile Leu Ser Asp Pro Glu Val Leu Ala 195 200 205

Ala Met Gln Asp Pro Glu Val Met Val Ala Phe Gln Asp Val Ala Gln 210 215 220

Asn Pro Ala Asn Met Ser Lys Tyr Gln Ser Asn Pro Lys Val Met Asn 225 230 235 235

Leu Ile Ser Lys Leu Ser Ala Lys Phe Gly Gly Gln Ala 245 250

<210> 1043

<211> 343

<212> PRT

<213> Homo sapiens

<400> 1043

Met Lys Thr Cys Gln Glu Glu Lys Leu Met Gly His Leu Gly Val Val 1 5 10 15

Leu Tyr Glu Tyr Leu Gly Glu Glu Tyr Pro Glu Val Leu Gly Ser Ile
20 25 30

Leu Gly Ala Leu Lys Ala Ile Val Asn Val Ile Gly Met His Lys Met
35 40 45

Thr Pro Pro Ile Lys Asp Leu Leu Pro Arg Leu Thr Pro Ile Leu Lys
50 60

Asn Arg His Glu Lys Val Gln Glu Asn Cys Ile Asp Leu Val Gly Arg 65 70 75 80

Ile Ala Asp Arg Gly Ala Glu Tyr Val Ser Ala Arg Glu Trp Met Arg 85 90 95

Ile Cys Phe Glu Leu Leu Glu Leu Leu Lys Ala His Lys Lys Ala Ile 100 105 110

Arg Arg Ala Thr Val Asn Thr Phe Gly Tyr Ile Ala Lys Ala Ile Gly
115 120 125

Pro His Asp Val Leu Ala Thr Leu Leu Asn Asn Leu Lys Val Gln Glu 130 135 140

Arg Gln Asn Arg Val Cys Thr Thr Val Ala Ile Ala Ile Val Ala Glu
145 150 155 160

Thr Cys Ser Pro Phe Thr Val Leu Pro Ala Leu Met Asn Glu Tyr Arg 165 170 175

Val Pro Glu Leu Asn Val Gln Asn Gly Val Leu Lys Ser Leu Ser Phe

1024

185 190 180 Leu Phe Glu Tyr Ile Gly Glu Met Gly Lys Asp Tyr Ile Tyr Ala Val 200 Thr Pro Leu Leu Glu Asp Ala Leu Met Asp Arg Asp Leu Val His Arg 215 220 210 Gln Thr Ala Ser Ala Val Val Gln His Met Ser Leu Gly Val Tyr Gly Phe Gly Cys Glu Asp Ser Leu Asn His Leu Leu Asn Tyr Val Trp Pro Asn Val Phe Glu Thr Ser Pro His Val Ile Gln Ala Val Met Gly Ala 265 Leu Glu Gly Leu Arg Val Ala Ile Gly Pro Cys Arg Met Leu Gln Tyr 280 Cys Leu Gln Gly Leu Phe His Pro Ala Arg Lys Val Arg Asp Val Tyr 295 300 Trp Lys Ile Tyr Asn Ser Ile Tyr Ile Gly Ser Gln Asp Ala Leu Ile 310 Ala His Tyr Pro Arg Ile Tyr Asn Asp Asp Lys Asn Thr Tyr Ile Arg 330 Tyr Glu Leu Asp Tyr Ile Leu 340 <210> 1044 <211> 268 <212> PRT <213> Homo sapiens <220> <221> SITE <223> Xaa equals any of the naturally occurring L-amino acids <400> 1044 Leu Arg Arg Pro Tyr Ala Arg Tyr Asn Gly Leu Tyr Arg Ser Gly Ile

Arg Gly Arg 'Xaa Asn Leu Glu Ser Thr Arg Val Arg Glu Leu Pro Gly

Gly	Ala Me	t Ser	Cys	He	Asn	Leu	Pro	Thr	Val	Leu	Pro	Gly	Ser	Pro
	3	5				40					45			

- Ser Lys Thr Arg Gly Gln Ile Gln Val Ile Leu Gly Pro Met Phe Ser 50 55 60
- Gly Lys Ser Thr Glu Leu Met Arg Arg Val Arg Arg Phe Gln Ile Ala 65 70 75 80
- Gln Tyr Lys Cys Leu Val Ile Lys Tyr Ala Lys Asp Thr Arg Tyr Ser 85 90 95
- Ser Ser Phe Cys Thr His Asp Arg Asn Thr Met Glu Ala Leu Pro Ala 100 105 110
- Cys Leu Leu Arg Asp Val Ala Gln Glu Ala Leu Gly Val Ala Val Ile 115 120 125
- Gly Ile Asp Glu Gly Gln Phe Phe Pro Asp Ile Val Glu Phe Cys Glu 130 135 140
- Ala Met Ala Asn Ala Gly Lys Thr Val Ile Val Ala Ala Leu Asp Gly 145 150 155 160
- Thr Phe Gln Arg Lys Pro Phe Gly Ala Ile Leu Asn Leu Val Pro Leu 165 170 175
- Ala Glu Ser Val Val Lys Leu Thr Ala Val Cys Met Glu Cys Phe Arg 180 185 190
- Glu Ala Ala Tyr Thr Lys Arg Leu Gly Thr Glu Lys Glu Val Glu Val
 195 200 205
- Ile Gly Gly Ala Asp Lys Tyr His Ser Val Cys Arg Leu Cys Tyr Phe 210 215 220
- Lys Lys Ala Ser Gly Gln Pro Ala Gly Pro Asp Asn Lys Glu Asn Cys 225 230 235 240
- Pro Val Pro Gly Lys Pro Gly Glu Ala Val Ala Ala Arg Lys Leu Phe 245 250 255
- Ala Pro Gln Gln Ile Leu Gln Cys Ser Pro Ala Asn 260 265

<210> 1045

<211> 139

<212> PRT

<213> Homo sapiens

<220> <221> SITE <222> (128) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1045 Pro Gly Gln Ser Arg Trp Gln Gly Pro Pro Leu Pro Leu Cys Gln Ala Gly Ser Ala Lys Ser Gly Glu Pro Gly Ala Gly Gly Lys Ala Gly Asp Ser Pro Ala Leu Pro Pro Pro Pro Leu Gly Ala Gln Gln Leu Leu Arg 40 Lys Val Trp His Pro Trp Arg Gly Gly Ala Pro Gly Trp Ala Gly Ser Arg Trp Pro Gly Ala Trp Arg Cys Ala Ala Gly Ala Cys Met Ala Pro Arg Gly Thr Gln Ala Glu Glu Ser Pro Phe Val Gly Asn Pro Gly Asn Ile Thr Gly Ala Arg Gly Leu Thr Gly Thr Leu Arg Cys Gln Leu Gln 105 Val Gln Gly Glu Pro Pro Glu Val His Trp Leu Arg Asp Gly Gln Xaa 120 Leu Glu Leu Ala Asp Ser Thr Gln Thr Gln Val 130 135 <210> 1046 <211> 416 <212> PRT <213> Homo sapiens <400> 1046 Ser Pro Ser Glu Arg Leu Gln Arg Gly Arg Glu Glu Gln Pro Ala Gly 5 Gly Gly Glu Ser Val Ser Ser Trp Glu Glu Gln Asn Arg Gly Gly

Ala Pro Ala Gly Ala Gly Gly Gly Pro Thr Met Ala Ile Arg Lys Lys 35 40 45

ser	50	Lys	Ser	Pro	Pro	55	Leu	ser	HIS	GIu	60	Val	Leu	GIn	Asn
His 65	Ala	Asp	Ile	Val	Ser 70	Cys	Val	Ala	Met	Val 75	Phe	Leu	Leu	Gly	Leu 80
Met	Phe	Glu	Ile	Thr 85	Ala	Lys	Ala	Ser	Ile 90	Ile	Phe	Val	Thr	Leu 95	Gln
Tyr	Asn	Val	Thr 100	Leu	Pro	Ala	Thr	Glu 105	Glu	Gln	Ala	Thr	Glu 110	Ser	Va1
Ser	Leu	Туг 115	Tyr	Tyr	Gly	Ile	Lys 120	Asp	Leu	Ala	Thr	Val 125	Phe	Phe	Tyr
Met	Leu 130	Val	Ala	Ile	Ile	Ile 135	His	Ala	Val	Ile	Gln 140	Glu	Tyr	Met	Leu
Asp 145	Lys	Ile	Asn	Arg	Arg 150	Met	His	Phe	Ser	Lys 155	Thr	Lys	His	Ser	Lys 160
				165					170	_			Ala	175	
_	_		180					185					Asp 190		
		195			-		200					205	Gln		_
	210	_				215		_	_		220		Phe		
225				_	230	_	_			235			Gln		240
				245					250				Leu	255	
			260	-				265				-	Phe 270		
		275					280					285	Glu		
	290					295					300		Gly		
Leu 305	Thr	Leu	Ile	Leu	Ser 310	Val	Leu	Thr	Val	Gly 315	Phe	Gly	Leu	Ala	Arg 320

Ala Val Arg Ile Ala Val Leu Ala Ser Ile Cys Val Thr Gln Ala Phe Ala Ser Ile Cys Val Thr Gln Ala Phe 350

Met Met Trp Lys Phe Ile Ala Val Val Leu Ala Ser Ile Cys Val Thr Gln Ala Phe 355

Ser Ala Phe Gln Ala Pro Ala Val Lys Lys Lys Pro Thr Val Thr Lys 370

Thr Ser Asn Val Ala Asp Ser Pro Arg Asn Lys Lys Glu Lys Ser Ser 405 410 415

Gly Arg Ser Ser Lys Lys Gly Thr Glu Asn Gly Val Asn Gly Thr Leu

395

390

<210> 1047

<211> 466

<212> PRT

<213> Homo sapiens

<400> 1047

Pro Ala Ser Ser Gly Leu Leu Pro Leu Ser Arg Ser Asn Leu Tyr Ser 1 10 15

Gly Arg Thr Gly Ile Pro Arg Ala Pro Pro Ala Leu Ala Leu Ala 20 25 30

Thr Ala Pro Gly Arg Arg Ala Pro Val His Thr Gly Ser Leu Leu Gly 35 40 45

Thr Asn Ser Ser Thr Met Gly Leu Ala Trp Gly Leu Gly Val Leu Phe 50 60

Leu Met His Val Cys Gly Thr Asn Arg Ile Pro Glu Ser Gly Gly Asp
65 70 75 80

Asn Ser Val Phe Asp Ile Phe Glu Leu Thr Gly Ala Ala Arg Lys Gly 85 90 95

Ser Gly Arg Arg Leu Val Lys Gly Pro Asp Pro Ser Ser Pro Ala Phe 100 105 110

Arg Ile Glu Asp Ala Asn Leu Ile Pro Pro Val Pro Asp Asp Lys Phe

		115					120					125			
Gln	Asp 130	Leu	Val	Asp	Ala	Val 135	Arg	Ala	Glu	Lys	Gly 140	Phe	Leu	Leu	Leu
Ala 145	Ser	Leu	Arg	Gln	Met 150	Lys	Lys	Thr	Arg	Gly 155	Thr	Leu	Leu	Ala	Leu 160
Glu	Arg	Lys	Asp	His 165	Ser	Gly	Gln	Val	Phe 170	Ser	Val	Val	Ser	Asn 175	Gly
Lys	Ala	Gly	Thr 180	Leu	Asp	Leu	Ser	Leu 185	Thr	Val	Gln	Gly	Lys 190	Gln	His
Val	Val	Ser 195	Val	Glu	Glu	Ala	Leu 200	Leu	Ala	Thr	Gly	Gln 205	Trp	Lys	Ser
Ile	Thr 210	Leu	Phe	Val	Gln	Glu 215	Asp	Arg	Ala	Gln	Leu 220	Tyr	Ile	Asp	Cys
Glu 225	Lys	Met	Glu	Asn	Ala 230	Glu	Leu	Asp	Val	Pro 235	Ile	Gln	Ser	Val	Phe 240
Thr	Arg	Asp	Leu	Ala 245	Ser	Ile	Ala	Arg	Leu 250	Arg	Ile	Ala	Lys	Gly 255	Gly
Val	Asn	Asp	Asn 260	Phe	Gln	Gly	Val	Leu 265	Gln	Asn	Val	Arg	Phe 270	Val	Phe
Gly	Thr	Thr 275	Pro	Glu	Asp	Ile	Leu 280	Arg	Asn	Lys	Gly	Cys 285	Ser	Ser	Ser
Thr	Ser 290	Val	Leu	Leu	Thr	Leu 295	Asp	Asn	Asn	Val	Val 300	Asn	Gly	Ser	Ser
Pro 305	Ala	Ile	Arg	Thr	Asn 310	Tyr	Ile	Gly	His	Lys 315	Thr	Lys	Asp	Leu	Gln 320
Ala	Ile	Cys	Gly	11e 325	Ser	Суз	Asp	Glu	Leu 330	Ser	ser	Met	Val	Leu 335	Glu
Leu	Arg	Gly	Leu 340	Arg	Thr	Ile	Val	Thr 345	Thr	Leu	Gln	Asp	Ser 350	Ile	Arg
Lys	Val	Thr 355	Glu	Glu	Asn	Lys	Glu 360	Leu	Ala	Asn	Glu	Leu 365	Arg	Arg	Pro
Pro	Leu 370	Cys	Tyr	His	Asn	Gly 375	Val	Gln	Tyr	Arg	Asn 380	Asn	Glu	Glu	Trp
Thr	Val	Asp	Ser	Cvs	Thr	G1u	Cvs	His	Cvs	Gln	Asn	Ser	Val	Thr	Ile

1030

395 385 390 400 Cys Lys Lys Val Ser Cys Pro Ile Met Pro Cys Ser Asn Ala Thr Val 410 405 Pro Asp Gly Glu Cys Cys Pro Arg Cys Trp Pro Ser Asp Ser Ala Asp 425 Asp Gly Trp Ser Pro Trp Ser Glu Trp Thr Ser Cys Ser Thr Ser Cys 435 440 Gly Asn Gly Ile Gln Gln Arg Gly Arg Ser Cys Asp Ser Ala Gln Gln 455 Pro Met 465 <210> 1048 <211> 217 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (122) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (186) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (200) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1048 Asp Pro Arg Val Arg Gln Ser His Ile Ser Asp Thr Ser Val Val 10 5 Lys Leu Asp Asn Ser Arg Asp Leu Asn Met Asp Cys Ile Ile Ala Glu 25 Ile Lys Ala Gln Tyr Asp Asp Ile Val Thr Arg Ser Arg Ala Glu Ala 40 35 Glu Ser Trp Tyr Arg Ser Lys Cys Glu Glu Met Lys Ala Thr Val Ile 55 60 50

1031

Arg His Gly Glu Thr Leu Arg Arg Thr Lys Glu Glu Ile Asn Glu Leu

65 Asn Arg Met Ile Gln Arg Leu Thr Ala Glu Val Glu Asn Ala Lys Cys Gln Asn Ser Lys Leu Glu Ala Ala Val Ala Gln Ser Glu Gln Gln Gly 105 Glu Ala Ala Leu Ser Asp Ala Arg Cys Xaa Leu Ala Glu Leu Glu Gly 120 Ala Leu Gln Lys Ala Lys Gln Asp Met Ala Cys Leu Ile Arg Glu Tyr 135 Gln Glu Val Met Asn Ser Lys Leu Gly Leu Asp Ile Glu Ile Ala Thr 150 155 145 Tyr Arg Arg Leu Leu Glu Gly Glu Glu Gln Arg Leu Cys Glu Gly Ile Gly Ala Val Asn Val Cys Val Ser Ser Xaa Arg Gly Gly Val Val Cys Gly Asp Leu Cys Val Ser Gly Xaa Arg Pro Val Thr Ala Val Ser Ala 195 200 205 Ala Leu Arg Ala Thr Gly Thr Trp Arg 210 215 <210> 1049 <211> 406 <212> PRT <213> Homo sapiens <400> 1049 Gly Ser Ala Ala Ala Arg Tyr Leu Ser Ala Thr Trp Arg Asn Trp Ile 10 Ser Leu Pro Pro Ala Gly Leu Pro Ala Thr Ala Gly Leu Arg His Ser 20 Gly Ser Leu Met Ala Ala Thr Cys Glu Ile Ser Asn Ile Phe Ser Asn 40

Tyr Phe Ser Ala Met Tyr Ser Ser Glu Asp Ser Thr Leu Ala Ser Val

Pro 65	Pro	Ala	Ala	Thr	Phe 70	Gly	Ala	Asp	Asp	Leu 75	Val	Leu	Thr	Leu	Ser 80
Asn	Pro	Gln	Met	Ser 85	Leu	Glu	Gly	Thr	Glu 90	Lys	Ala	Ser	Trp	Leu 95	Gly
Glu	Gln	Pro	Gln 100	Phe	Trp	Ser	Lys	Thr 105	Gln	Val	Leu	Asp	Trp 110	Ile	Ser
Tyr	Gln	Val 115	Glu	Lys	Asn	Lys	Tyr 120	Asp	Ala	Ser	Ala	Ile 125	yab	Phe	Ser
Arg	Cys 130	Asp	Met	Asp	Gly	Ala 135	Thr	Leu	Cys	Asn	Cys 140	Ala	Leu	Glu	Glu
Leu 145	Arg	Leu	Val	Phe	Gly 150	Pro	Leu	Gly	Asp	Gln 155	Leu	His	Ala	Gln	Leu 160
Arg	Asp	Leu	Thr	Ser 165	Ser	Ser	Şer	Asp	Glu 170	Leu	Ser	Trp	Ile	Ile 175	Glu
Leu	Leu	Glu	Lys 180	Asp	Gly	Met	Ala	Phe 185	Gln	Glu	Ala	Leu	Asp 190	Pro	Gly
Pro	Phe	Asp 195	Gln	Gly	Ser	Pro	Phe 200	Ala	Gln	Glu	Leu	Leu 205	Asp	Asp	Gly
Gln	Gln 210	Ala	Ser	Pro	Tyr	His 215	Pro	Gly	Ser	Cys	Gly 220	Ala	Gly	Ala	Pro
Ser 225	Pro	Gly	Ser	Ser	Asp 230	Val	Ser	Thr	Ala	Gly 235	Thr	Gly	Ala	Ser	Arg 240
Ser	Ser	His	Ser	Ser 245	Asp	Ser	Gly	Gly	Ser 250	Asp	Val	Asp	Leu	Asp 255	Pro
Thr	Asp	Gly	Lys 260	Leu	Phe	Pro	Ser	Asp 265	Gly	Phe	Arg	Asp	Cys 270	Lys	Lys
Gly	Asp	Pro 275	Lys	His	Gly	Lys	Arg 280	Lys	Arg	Gly	Arg	Pro 285	Arg	Lys	Leu
Ser	Lys 290	Glu	Tyr	Trp	Asp	Cys 295	Leu	Glu	Gly	Lys	Lys 300	Ser	Lys	His	Ala
Pro 305	Arg	Gly	Thr	His	Leu 310	Trp	Glu	Phe	Ile	Arg 315	Asp	Ile	Leu	Ile	His 320
Pro	Glu	Leu	Asn	Glu 325	Gly	Leu	Met	Lys	Trp		Asn	Arg	His	Glu 335	Gly

1033

Val Phe Lys Phe Leu Arg Ser Glu Ala Val Ala Gln Leu Trp Gly Gln 340 345 350

Lys Lys Asn Ser Asn Met Thr Tyr Glu Lys Leu Ser Arg Ala Met 355 360 365

Arg Tyr Tyr Lys Arg Glu Ile Leu Glu Arg Val Asp Gly Arg Arg 370 375 380

Leu Val Tyr Lys Phe Gly Lys Asn Ser Ser Gly Trp Lys Glu Glu Glu 385 390 395 400

Val Leu Gln Ser Arg Asn 405

<210> 1050

<211> 251

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (53)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (86)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1050

Arg Pro Ala Leu Asp Thr Cys Cys Pro Phe Pro Ala Arg Ile Leu Gly
1 5 10 15

Ser Phe Pro Leu Ser Gln His Leu Gly Pro Ala Phe Asp Thr Thr Pro 20 25 30

Arg Leu Pro Thr Leu Arg Ala Trp Ser Leu Pro Gln Gly Pro Leu Ser 35 40 45

Trp Ala Met Ala Xaa Lys Gly Val Leu Gly Pro Gly Gln Leu Gly Ala 50 60

Val Ala Ile Leu Leu Tyr Leu Gly Leu Leu Arg Ser Gly Thr Gly Ala 65 70 75 80

Glu Gly Ala Glu Ala Xaa Cys Gly Val Ala Pro Gln Ala Arg Ile Thr

1034

Gly Gly Ser Ser Ala Val Ala Gly Gln Trp Pro Trp Gln Val Ser Ile 105 Thr Tyr Glu Gly Val His Val Cys Gly Gly Ser Leu Val Ser Glu Gln 120 Trp Val Leu Ser Ala Ala His Cys Phe Pro Ser Glu His His Lys Glu 135 Ala Tyr Glu Val Lys Leu Gly Ala His Gln Leu Asp Ser Tyr Ser Glu 150 155 Asp Ala Lys Val Ser Thr Leu Lys Asp Ile Ile Pro His Pro Ser Tyr 165 170 Leu Gln Glu Gly Ser Gln Gly Asp Ile Ala Leu Leu Gln Leu Ser Arg 185 Pro Ile Thr Phe Ser Arg Tyr Ile Arg Pro Ile Cys Leu Pro Ala Ala 200 205 195 Asn Ala Ser Phe Pro Asn Gly Leu His Cys Thr Val Thr Gly Trp Gly 215 His Val Ala Pro Ser Val Ser Leu Leu Thr Pro Lys Pro Leu Gln Gln 230 235 Leu Glu Val Pro Leu Ile Ser Arg Glu Thr Trp 245

<210> 1051

<211> 171

<212> PRT

<213> Homo sapiens

<400> 1051

His Tyr Arg Arg Tyr Ala Cys Arg Tyr Arg Ser Gly Ile Arg Gly Arg 1 5 10 15

Val Asp Ile Arg Arg Ser Ser Arg Arg Pro Arg Glu Pro Pro Gly
20 25 30

Pro Ser Arg Arg Arg Arg Arg Pro Asp Pro Arg Thr Met Pro 35 40 45

Ser Glu Lys Thr Phe Lys Gln Arg Arg Thr Phe Glu Gln Arg Val Glu 50 60

Asp Val Arg Leu Ile Arg Glu Gln His Pro Thr Lys Ile Pro Val Ile

1035

70 75 65 Ile Glu Arg Tyr Lys Gly Glu Lys Gln Leu Pro Val Leu Asp Lys Thr 90 Lys Phe Leu Val Pro Asp His Val Asn Met Ser Glu Leu Ile Lys Ile 105 Ile Arg Arg Arg Leu Gln Leu Asn Ala Asn Gln Ala Phe Phe Leu Leu 120 Val Asn Gly His Ser Met Val Ser Val Ser Thr Pro Ile Ser Glu Val 135 140 Tyr Glu Ser Glu Lys Asp Glu Asp Gly Phe Leu Tyr Met Val Tyr Ala 145 150 155 Ser Gln Glu Thr Phe Gly Met Lys Leu Ser Val 165 170 <210> 1052 <211> 189 <212> PRT <213> Homo sapiens <400> 1052 Gly Gly Pro Thr Cys Ser Ala Arg Cys Glu Pro Val Arg Pro Pro Pro Ala Pro Glu Gln Pro Ala Ser Leu His Arg Leu Leu Ser Val Leu Ser 20 Pro Arg Ala Ala Ile Ala Val Met Leu Gly Ala Ala Leu Arg Arg Cys 40 Ala Val Ala Ala Thr Thr Arg Ala Asp Pro Arg Gly Leu Leu His Ser 55 Ala Arg Thr Pro Gly Pro Ala Val Ala Ile Gln Ser Val Arg Cys Tyr 70 65 Ser His Gly Ser Gln Glu Thr Asp Glu Glu Phe Asp Ala Arg Trp Val Thr Tyr Phe Asn Lys Pro Asp Ile Asp Ala Trp Glu Leu Arg Lys Gly Ile Asn Thr Leu Val Thr Tyr Asp Met Val Pro Glu Pro Lys Ile Ile 120 115 125

1036

Asp Ala Ala Leu Arg Ala Cys Arg Arg Leu Asn Asp Phe Ala Ser Thr Val Arg Ile Leu Glu Val Val Lys Asp Lys Ala Gly Pro His Lys Glu Ile Tyr Pro Tyr Val Ile Gln Glu Leu Arg Pro Thr Leu Asn Glu Leu 170 Gly Ile Ser Thr Pro Glu Glu Leu Gly Leu Asp Lys Val 185 <210> 1053 <211> 315 <212> PRT <213> Homo sapiens <400> 1053 Arg His Ser Ala Ser Pro Arg Cys Arg Leu Pro Pro Thr Glu Pro Val Ser Gly Leu Arg Ala Ser Gly Glu Met Leu Leu Pro Leu Leu Leu 25 Leu Pro Met Cys Trp Ala Val Glu Val Lys Arg Pro Arg Gly Val Ser Leu Thr Asn His His Phe Tyr Asp Glu Ser Lys Pro Phe Thr Cys Leu Asp Gly Ser Ala Thr Ile Pro Phe Asp Gln Val Asn Asp Asp Tyr Cys Asp Cys Lys Asp Gly Ser Asp Glu Pro Gly Thr Ala Ala Cys Pro Asn 90 Gly Ser Phe His Cys Thr Asn Thr Gly Tyr Lys Pro Leu Tyr Ile Pro 105 Ser Asn Arg Val Asn Asp Gly Val Cys Asp Cys Cys Asp Gly Thr Asp 115 120 Glu Tyr Asn Ser Gly Val Ile Cys Glu Asn Thr Cys Lys Glu Lys Gly Arg Lys Glu Arg Glu Ser Leu Gln Gln Met Ala Glu Val Thr Arg Glu

155

150

Ala Phe Lys Glu Leu Asp Asp Asp Met Asp Gly Thr Val Ser Val Thr 245 250 250

Glu Leu Gln Thr His Pro Glu Leu Asp Thr Asp Gly Asp Gly Ala Leu 260 265 270

Ser Glu Ala Glu Ala Gln Ala Leu Leu Ser Gly Asp Thr Gln Thr Asp 275 280 285

Ala Thr Ser Phe Tyr Asp Arg Val Trp Gly Pro Gly Gly Ala Gly Pro 290 295 300

His Ser Gln Ala Pro Thr Ala Phe Lys Asp Gly 305 310 315

<210> 1054

<211> 138

<212> PRT

<213> Homo sapiens

<400> 1054

Val Trp Lys Val Ile Val Trp Ser His Ser Ser Leu Ile Thr Leu Leu

1 5 10 15

Gly Ile Leu Glu Glu Lys Gly Ser Lys Thr Tyr Thr His Thr Pro Thr 20 25 30

Gln Ser Asn Ser Val Phe Lys Gln Ile Pro Arg Ile Leu Gly Pro Gly 35 40 45

Leu Asn Lys Ala Gly Lys Phe Pro Ser Leu Leu Thr His Asn Glu Asn 50 55 60

Met Val Ala Lys Val Asp Glu Val Lys Ser Thr Ile Lys Phe Gln Met

70 65 75 Lys Lys Val Leu Cys Leu Ala Val Ala Val Gly His Val Lys Met Thr 85 90 Asp Asp Glu Leu Val Tyr Asn Ile His Leu Ala Val Asn Phe Leu Val 100 105 Ser Leu Leu Lys Lys Asn Trp Gln Asn Val Arg Ala Leu Tyr Ile Lys 120 Ser Thr Met Gly Lys Pro Gln Arg Leu Tyr <210> 1055 <211> 243 <212> PRT <213> Homo sapiens <400> 1055 Gly Thr Arg Glu Glu Ala Gly Val Asp Leu Val Ser Pro Thr Pro Leu Thr Pro Pro Asp Pro Gly Ala Ala Ser Ala Thr Ala Thr Ala Pro Ala Pro Ala Ala Arg Arg Gly Glu Ala Met Ala Lys Val Ser Val Leu 40 Asn Val Ala Val Leu Glu Asn Pro Ser Pro Phe His Ser Pro Phe Arg 50 Phe Glu Ile Ser Phe Glu Cys Ser Glu Ala Leu Ala Asp Asp Leu Glu Trp Lys Ile Ile Tyr Val Gly Ser Ala Glu Ser Glu Glu Phe Asp Gln Ile Leu Asp Ser Val Leu Val Gly Pro Val Pro Ala Gly Arg His Met 100 Phe Val Phe Gln Ala Asp Ala Pro Asn Pro Ser Leu Ile Pro Glu Thr 120 Asp Ala Val Gly Val Thr Val Val Leu Ile Thr Cys Thr Tyr His Gly 130 135 Gln Glu Phe Ile Arg Val Gly Tyr Tyr Val Asn Asn Glu Tyr Leu Asn 150 155

Pro Glu Leu Arg Glu Asn Pro Pro Met Lys Pro Asp Phe Ser Gln Leu 170 Gln Arg Asn Ile Leu Ala Ser Asn Pro Arg Val Thr Arg Phe His Ile 185 Asn Trp Asp Asn Asn Met Asp Arg Leu Glu Ala Ile Glu Thr Gln Asp 195 200 Pro Ser Leu Gly Cys Gly Leu Pro Leu Asn Cys Thr Pro Ile Lys Gly 215 Leu Gly Leu Pro Gly Cys Ile Pro Gly Leu Leu Pro Glu Asn Ser Met 230 235 Asp Cys Ile <210> 1056 <211> 211 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (8) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1056 His Glu Pro Arg Arg Leu Leu Xaa Asp Ala Glu Gly Pro Glu Glu Thr Val Arg Leu Trp Pro Ala Ala Arg Ala Ala Met Asp Ala Ala Glu Val Glu Phe Leu Ala Glu Lys Glu Leu Val Thr Ile Ile Pro Asn Phe Ser Leu Asp Lys Ile Tyr Leu Ile Gly Gly Asp Leu Gly Pro Phe Asn Pro 55 60

Gly Leu Pro Val Glu Val Pro Leu Trp Leu Ala Ile Asn Leu Lys Gln

Arg Gln Lys Cys Arg Leu Leu Pro Pro Glu Trp Met Asp Val Glu Lys

Leu Glu Lys Met Arg Asp His Glu Arg Lys Glu Glu Thr Phe Thr Pro

90

1040

105 110 100 Met Pro Ser Pro Tyr Tyr Met Glu Leu Thr Lys Leu Leu Leu Asn His 120 Ala Ser Asp Asn Ile Pro Lys Ala Asp Glu Ile Arg Thr Leu Val Lys Asp Met Trp Asp Thr Arg Ile Ala Lys Leu Arg Val Ser Ala Asp Ser Phe Val Arg Gln Glu Ala His Ala Lys Leu Asp Asn Leu Thr Leu 165 170 Met Glu Ile Asn Thr Ser Gly Thr Phe Leu Thr Gln Ala Leu Asn His 180 185 Met Tyr Lys Leu Arg Thr Asn Leu Gln Pro Leu Glu Ser Thr Gln Ser 200 Gln Asp Phe 210 <210> 1057 <211> 407 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (343) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1057 Val Ile Leu Gly Ala Gly Leu Arg Asp Lys Asp Met Trp Ile Pro Val Val Gly Leu Pro Arg Arg Leu Arg Leu Ser Ala Leu Ala Gly Ala Gly Arg Phe Cys Ile Leu Gly Ser Glu Ala Ala Thr Arg Lys His Leu Pro Ala Arg Asn His Cys Gly Leu Ser Asp Ser Ser Pro Gln Leu Trp Pro 55 Glu Pro Asp Phe Arg Asn Pro Pro Arg Lys Ala Ser Lys Ala Ser Leu

75

70

Asp	Phe	Lys	Arg	Tyr 85	Val	Thr	Asp	Arg	Arg 90	Leu	Ala	Glu	Thr	Leu 95	Ala
Gln	Ile	туг	Leu 100	Gly	Lys	Pro	Ser	Arg 105	Pro	Pro	His	Leu	Leu 110	Leu	Glu
Суз	Asn	Pro 115	Gly	Pro	Gly	Ile	Leu 120	Thr	Gln	Ala	Leu	Leu 125	Glu	Ala	Gly
Ala	Lys 130	Val	Val	Ala	Leu	Glu 135	Ser	Asp	Lys	Thr	Phe 140	Ile	Pro	His	Leu
Glu 145	Ser	Leu	Gly	Lys	Asn 150	Leu	Asp	Gly	Lys	Leu 155	Arg	Val	Ile	His	Cys 160
Asp	Phe	Phe	Lys	Leu 165	Asp	Pro	Arg	Ser	Gly 170	Gly	Val	Ile	Lys	Pro 175	Pro
Ala	Met	Ser	Ser 180	Arg	Gly	Leu	Phe	Lys 185	Asn	Leu	Gly	Ile	Glu 190	Ala	Val
Pro	Trp	Thr 195	Ala	Asp	Ile	Pro	Leu 200	Lys	Val	Val	Gly	Met 205	Phe	Pro	Ser
Arg	Gly 210	Glu	Lys	Arg	Ala	Leu 215	Trp	Lys	Leu	Ala	Tyr 220	Asp	Leu	Tyr	Ser
Cys 225	Thr	Ser	Ile	Tyr	Lys 230	Phe	Gly	Arg	Ile	Glu 235	Val	Asn	Met	Phe	11e 240
		_		245	Gln	-			250	_				255	Ī
	-		260		Ser			265					270		
		275			Pro		280					285			
•	290				Pro	295					300				
305	_		_		11e 310					315					320
				325	Met				330					335	
His	Cys	Phe	Gly	Arg	Arg	Xaa	Ala	Thr	Val	Ile	Asp	His	Leu 350	Arg	Ser

1042

Leu Thr Pro Leu Asp Ala Arg Asp Ile Leu Met Gln Ile Gly Lys Gln 355 360 365

Glu Asp Glu Lys Val Val Asn Met His Pro Gln Asp Phe Lys Thr Leu 370 375 380

Phe Glu Thr Ile Glu Arg Ser Lys Asp Cys Ala Tyr Lys Trp Leu Tyr 385 390 395 400

Asp Glu Thr Leu Glu Asp Arg 405

<210> 1058

<211> 89

<212> PRT

<213> Homo sapiens

<400> 1058

Ser Ser Trp Val Gly Gly Ser Leu Arg Gln Ala Ala Thr Leu Glu Gly
1 5 10 15

Glu Gln Gly Ser Ala Val Ser Ala Ala Ser His Ala Arg Ser Asp Leu 20 25 30

Ser Leu Gly Thr Pro Gln Glu Pro Glu Asp Ser Ser Gly Gln Cys Arg
35 40 45

Trp Gly Val Gly Glu Ser Gly Arg Glu Ala Leu Arg Ala Pro Ser 50 55 60

Pro Thr Thr Asn Leu Ala Leu Val Val Ile Phe Arg Gln Asn Phe Val 65 70 75 80

Val Phe Pro Phe Tyr Asp Gly Phe 85

<210> 1059

<211> 457

<212> PRT

<213> Homo sapiens

<400> 1059

Gly Thr Arg Pro Ser Ser Cys Ser Gln Thr Glu Ala Gln Pro Pro Ser 1 5 10 15

Pro Val Ser Ile Thr Ser Ala Ala Ser Met Ser Asp Lys Leu Pro Tyr
20 25 30

Lys	Val	Ala 35	Asp	Ile	Gly	Leu	Ala 40	Ala	Trp	Gly	Arg	Lys 45	Ala	Leu	Asp
Ile	Ala 50	Glu	Asn	Glu	Met	Pro 55	Gly	Leu	Met	Arg	Met 60	Arg	Glu	Arg	Tyr
Ser 65	Ala	Ser	Lys	Pro	Leu 70	Lys	Gly	Ala	Arg	Ile 75	Ala	Gly	Cys	Leu	His 80
Met	Thr	Val	Glu	Thr 85	Ala	Val	Leu	Ile	Glu 90	Thr	Leu	Val	Thr	Leu 95	Gly
Ala	Glu	Val	Gln 100	Trp	Ser	Ser	Суѕ	Asn 105	Ile	Phe	Ser	Thr	Gln 110	Asp	His
Ala	Ala	Ala 115	Ala	Ile	Ala	Lys	Ala 120	Gly	Ile	Pro	Val	Туг 125	Ala	Trp	Lys
Gly	Glu 130	Thr	Asp	Glu	Glu	туг 135	Leu	Trp	Cys	Ile	Glu 140	Gln	Thr	Leu	Tyr
Phe 145	Lys	Asp	Gly	Pro	Leu 150	Asn	Met	Ile	Leu	Asp 155	Asp	Gly	Gly	Asp	Leu 160
Thr	Asn	Leu	Ile	His 165	Thr	Lys	Tyr	Pro	Gln 170	Leu	Leu	Pro	Gly	Ile 175	Arg
Gly	Ile	Ser	Glu 180	Glu	Thr	Thr	Thr	Gly 185	val	His	Asn	Leu	Tyr 190	Lys	Met
Met	Ala	Asn 195	Gly	Ile	Leu	Lys	Val 200	Pro	Ala	Ile	Asn	Val 205	Asn	Asp	Ser
Val	Thr 210	Lys	Ser	Lys	Phe	Asp 215	Asn	Leu	Tyr	Gly	Cys 220	Arg	Glu	Ser	Leu
Ile 225	Asp	Gly	Ile	Lys	Arg 230	Ala	Thr	Asp	Val	Met 235	Ile	Ala	Gly	Lys	Val 240
Ala	Val	Val	Ala	Gly 245	Tyr	Gly	Asp	Val	Gly 250	Lys	Gly	Суз	Ala	Gln 255	Ala
Leu	Arg	Gly	Phe 260	Gly	Ala	Arg	Val	Ile 265	Ile	Thr	Glu	Ile	Asp 270	Pro	Ile
Asn	Ala	Leu 275	Gln	Ala	Ala	Met	Glu 280	Gly	Tyr	Glu	Val	Thr 285	Thr	Met	Asp
Glu	Ala 290	Cys	Gln	Glu	Gly	Asn 295	Ile	Phe	Val	Thr	Thr 300	Thr	Gly	Cys	Ile

1044

Asp Ile Ile Leu Gly Arg His Phe Glu Gln Met Lys Asp Asp Ala Ile 315 305 310 Val Cys Asn Ile Gly His Phe Asp Val Glu Ile Asp Val Lys Trp Leu 330 Asn Glu Asn Ala Val Glu Lys Val Asn Ile Lys Pro Gln Val Asp Arg Tyr Arg Leu Lys Asn Gly Arg Arg Ile Ile Leu Leu Ala Glu Gly Arg Leu Val Asn Leu Gly Cys Ala Met Gly His Pro Ser Phe Val Met Ser 375 Asn Ser Phe Thr Asn Gln Val Met Ala Gln Ile Glu Leu Trp Thr His 390 395 385 Pro Asp Lys Tyr Pro Val Gly Val His Phe Leu Pro Lys Lys Leu Asp 410 405 Glu Ala Val Ala Glu Ala His Leu Gly Lys Leu Asn Val Lys Leu Thr 420 Lys Leu Thr Glu Lys Gln Ala Gln Tyr Leu Gly Met Ser Cys Asp Gly Pro Phe Lys Pro Asp His Tyr Arg Tyr 455 <210> 1060 <211> 511 <212> PRT <213> Homo sapiens

<400> 1060
Glu Gly Val Met Ala Asp Gly Gln Val Ala Glu Leu Leu Leu Arg Arg
1 5 10 15

Leu Glu Ala Ser Asp Gly Gly Leu Asp Ser Ala Glu Leu Ala Ala Glu

Leu Gly Met Glu His Gln Ala Val Val Gly Ala Val Lys Ser Leu Gln

Ala Leu Gly Glu Val Ile Glu Ala Glu Leu Arg Ser Thr Lys His Trp 50 55 60

Glu 65	Leu	Thr	Ala	Glu	Gly 70	Glu	GIu	IIe	ALA	75	GIU	GIĀ	ser	HIS	80 80
Ala	Arg	Val	Phe	Arg 85	Ser	Ile	Pro	Pro	Glu 90	Gly	Leu	Ala	Gln	Ser 95	Glu
Leu	Met	Arg	Leu 100	Pro	Ser	Gly	Lys	Val 105	Gly	Phe	Ser	Lys	Ala 110	Met	Ser
	_	115				Asp	120					125			
Phe	Arg 130	Val	Val	Asp	Ser	Met 135	Glu	Asp	Glu	Val	Gln 140	Arg	Arg	Leu	Gln
145					150	Ala				155					160
				165	_	Leu			170					175	
			180			Ala		185					190		
		195				Met	200					205			
	210					Phe 215					220				
225					230	Leu				235					240
				245		Thr			250					255	
			260			Asp		265					270		
	•	275				Thr	280					285			
	290					Tyr 295					300				
305	•	•	-	-	310	Gln	_			315					320
Glu	Ala	Arg	ГÀЗ	Asn 325	Leu	Leu	Arg	Thr	His 330	Thr	Thr	Ser	Ala	Ser 335	Ala

Arg Ala Leu Tyr Arg Leu Ala Gln Lys Lys Pro Phe Thr Pro Val Lys 340 345 Tyr Phe Ser Ile Asp Arg Val Phe Arg Asn Glu Thr Leu Asp Ala Thr 360 His Leu Ala Glu Phe His Gln Ile Glu Gly Val Val Ala Asp His Gly 375 Leu Thr Leu Gly His Leu Met Gly Val Leu Arg Glu Phe Phe Thr Lys 395 Leu Gly Ile Thr Gln Leu Arg Phe Lys Pro Ala Tyr Asn Pro Tyr Thr 410 405 Glu Pro Ser Met Glu Val Phe Ser Tyr His Gln Gly Leu Lys Lys Trp Val Glu Val Gly Asn Ser Gly Val Phe Arg Pro Glu Met Leu Leu Pro 440 Met Gly Leu Pro Glu Asn Val Ser Val Ile Ala Trp Gly Leu Ser Leu 455 Glu Arg Pro Thr Met Ile Lys Tyr Gly Ile Asn Asn Ile Arg Glu Leu 470 475 Val Gly His Lys Val Asn Leu Gln Met Val Tyr Asp Ser Pro Leu Cys 490 485 Arg Leu Asp Ala Glu Pro Arg Pro Pro Pro Thr Gln Glu Ala Ala 505

<210> 1061 <211> 228 <212> PRT

<213> Homo sapiens

<400> 1061

Arg Ala Ala Ser Thr Pro Arg Ala Ala Pro Gly Ala Ala Leu Leu Ser
1 5 10 15

Pro Pro Gly Leu Arg Ala Ala Pro Ala Ala Leu Val Met Gly Glu Gly 20 25 30

Thr Cys Glu Lys Arg Arg Asp Ala Glu Tyr Gly Ala Ser Pro Glu Gln 35 40

Val Ala Asp Asn Gly Asp Asp His Ser Glu Gly Gly Leu Val Glu Asn

1047

55

His Val Asp Ser Thr Met Asn Met Leu Gly Gly Gly Ser Ala Gly 75 Arg Lys Pro Leu Lys Ser Gly Met Lys Glu Leu Ala Val Phe Arg Glu Lys Val Thr Glu Gln His Arg Gln Met Gly Lys Gly Gly Lys His His 105 Leu Gly Leu Glu Glu Pro Lys Lys Leu Arg Pro Pro Pro Ala Arg Thr 120 Pro Cys Gln Gln Glu Leu Asp Gln Val Leu Glu Arg Ile Ser Thr Met 135 140 Arg Leu Pro Asp Glu Arg Gly Pro Leu Glu His Leu Tyr Ser Leu His 155 Ile Pro Asn Cys Asp Lys His Gly Leu Tyr Asn Leu Lys Gln Cys Lys Met Ser Leu Asn Gly Gln Arg Gly Glu Cys Trp Cys Val Asn Pro Asn 185 Thr Gly Lys Leu Ile Gln Gly Ala Pro Thr Ile Arg Gly Asp Pro Glu 200 Cys His Leu Phe Tyr Asn Glu Gln Glu Ala Arg Gly Val His Thr 220 215 Gln Arg Met Gln 225 <210> 1062 <211> 324 <212> PRT <213> Homo sapiens <400> 1062 Pro Arg Val Met Ala Met Ala Thr Lys Gly Gly Thr Val Lys Ala Ala 10 Ser Gly Phe Asn Ala Met Glu Asp Ala Gln Thr Leu Arg Lys Ala Met Lys Gly Leu Gly Thr Asp Glu Asp Ala Ile Ile Ser Val Leu Ala Tyr

Arg	Asn 50	Thr	Ala	Gln	Arg	Gln 55	Glu	Ile	Arg	Thr	Ala 60	Tyr	Lys	Ser	Thr
Ile. 65	Gly	Arg	Asp	Leu	Ile 70	Asp	Asp	Leu	Lys	Ser 75	Glu	Leu	Ser	Gly	Asn 80
Phe	Glu	Gln	Val	Ile 85	Val	Gly	Met	Met	Thr 90	Pro	Thr	Val	Leu	Tyr 95	Asp
Val	Gln	Glu	Leu 100	Arg	Arg	Ala	Met	Lys 105	Gly	Ala	Gly	Thr	Asp 110	Glu	Gly
Cys	Leu	Ile 115	Glu	Ile	Leu	Ala	Ser 120	Arg	Thr	Pro	Glu	Glu 125	Ile	Arg	Arg
Ile	Ser 130	Gln	Thr	Tyr	Gln	Gln 135	Gln	Tyr	Gly	Arg	Ser 140	Leu	Glu	Asp	Asp
11e 145	Arg	Ser	Asp	Thr	Ser 150	Phe	Met	Phe	Gln	Arg 155	Val	Leu	Val	Ser	Leu 160
Ser	Ala	Gly	Gly	Arg 165	Asp	Glu	Gly	Asn	Туг 170	Leu	Asp	Asp	Ala	Leu 175	Val
Arg	Gln	Asp	Ala 180	Gln	Asp	Leu	Tyr	Glu 185	Ala	Gly	Glu	Lys	Lys 190	Trp	Gly
Thr	Asp	Glu 195	Val	Lys	Phe	Leu	Thr 200	Val	Leu	Cys	Ser	Arg 205	Asn	Arg	Asn
His	Leu 210	Leu	His	Val	Phe	Asp 215	Glu	Tyr	Lys	Arg	Ile 220	Ser	Gln	Lys	Asp
Ile 225	Glu	Gln	Ser	Ile	Lys 230	Ser	Glu	Thr	Ser	Gly 235	Ser	Phe	Glu	Asp	Ala 240
Leu	Leu	Ala	Ile	Val 245	Lys	Суз	Met	Arg	Asn 250	Lys	Ser	Ala	Tyr	Phe 255	Ala
Glu	Lys	Leu	Туг 260	Lys	Ser	Met	Lys	Gly 265	Leu	Gly	Thr	Asp	Asp 270	Asn	Thr
Leu	Ile	Arg 275	Val	Met	Val	Ser	Arg 280	Ala	Glu	Ile	Asp	Met 285	Leu	Asp	Ile
Arg	Ala 290	His	Phe	Lys	Arg	Leu 295	туг	Gly	Lys	Ser	Leu 300	Tyr	Ser	Phe	Ile
Lys 305	Gly	Asp	Thr	Ser	Gly 310	Asp	Tyr	Arg	Lys	Val 315	Leu	Leu	Val	Leu	Cys 320

Gly Gly Asp Asp

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<210> 4063
<211> 355
<212> PRT
<213> Homo sapiens
<220>
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<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1063
Xaa Tyr Xaa Ile Pro Gly Ser Thr His Ala Ser Gly Lys Ile Leu Gly
Ser Gly Ile Ser Ser Ser Ser Val Leu His Gly Met Val Phe Lys Lys
Glu Thr Glu Val Xaa Val Thr Ser Val Lys Asp Ala Lys Ile Ala Val
         35
Tyr Ser Cys Pro Phe Asp Gly Met Ile Thr Glu Thr Lys Gly Thr Val
                         55
Leu Ile Lys Thr Ala Glu Glu Leu Met Asn Phe Ser Lys Gly Glu Glu
Asn Leu Met Asp Ala Gln Val Lys Ala Ile Ala Asp Thr Gly Ala Asn
                                     90
Val Val Val Thr Gly Gly Lys Val Ala Asp Met Ala Leu His Tyr Ala
                                105
Asn Lys Tyr Asn Ile Met Leu Val Arg Leu Asn Ser Lys Trp Asp Leu
                           120
        115
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Arg Arg Leu Cys Lys Thr Val Gly Ala Thr Ala Leu Pro Arg Leu Thr Pro Pro Val Leu Glu Glu Met Gly His Cys Asp Ser Val Tyr Leu Ser 150 Glu Val Gly Asp Thr Gln Val Val Phe Lys His Glu Lys Glu Asp 170 Gly Ala Ile Ser Thr Ile Val Leu Arg Gly Ser Thr Asp Asn Leu Met 185 Asp Asp Ile Glu Arg Ala Val Asp Asp Gly Val Asn Thr Phe Lys Val 200 Leu Thr Arg Asp Lys Arg Leu Val Pro Gly Gly Gly Ala Thr Glu Ile 215 Glu Leu Ala Lys Gln Ile Thr Ser Tyr Gly Glu Thr Cys Pro Gly Leu 230 225 Glu Gln Tyr Ala Ile Lys Lys Phe Ala Glu Ala Phe Glu Ala Ile Pro 250 Arg Ala Leu Ala Glu Asn Ser Gly Val Lys Ala Asn Glu Val Ile Ser 260 265 Lys Leu Tyr Ala Val His Gln Glu Gly Asn Lys Asn Val Gly Leu Asp 280 Ile Glu Ala Glu Val Pro Ala Val Lys Asp Met Leu Glu Ala Gly Ile 295 Leu Asp Thr Tyr Leu Gly Lys Tyr Trp Ala Ile Lys Leu Ala Thr Asn 305 Ala Ala Val Thr Val Leu Arg Val Asp Gln Ile Ile Met Ala Lys Pro 330 Ala Gly Gly Pro Lys Pro Pro Ser Gly Lys Lys Asp Trp Asp Asp Asp 345

Gln Asn Asp 355

<210> 1064

<211> 113

<212> PRT

<213> Homo sapiens

1051

<400> 1064 Ser Pro Phe Thr Leu His Cys Cys His Ser Thr Leu Tyr Asp Gly Arg Thr Gly Ser Ser Arg Glu Asn Cys Thr Val Thr Thr Val Phe Phe Thr 25 Leu Phe Gln Gly Ser Leu Ser Pro Asp Ile Glu Glu Ile Ser Phe Arg Pro Glu Thr Gln Arg Pro His Ser Pro Val Ile Lys Pro Arg Phe His Ser Gly Pro Arg Ser Gly Ala Trp Pro Leu Leu Phe Gly Ser His Trp Glu Ala His Trp Pro Trp Ile Ile Ser Ser Cys Thr Pro Gly Val Leu 90 Pro Ala Cys Leu Leu Ser Trp Thr Ala Val Cys Lys Lys Val Thr Lys 105 Thr <210> 1065 <211> 634 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (325) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1065 Val Gln Gly Phe Glu Ser Ala Thr Phe Leu Gly Tyr Phe Lys Ser Gly 10 Leu Lys Tyr Lys Lys Gly Gly Val Ala Ser Gly Phe Lys His Val Val

Pro Asn Glu Val Val Val Gln Arg Leu Phe Gln Val Lys Gly Arg Arg

Val Val Arg Ala Thr Glu Val Pro Val Ser Trp Glu Ser Phe Asn Asn

65	АЗР	cys	Pne	116	70	ASP	beu	GIY	ASII	75	116	nis	GIII	ΙΙĐ	80
Gly	Ser	Asn	Ser	Asn 85	Arg	Tyr	Glu	Arg	Leu 90	Lys	Ala	Thr	Gln	Val 95	Ser
Lys	Gly	Ile	Arg 100	Asp	Asn	Glu	Arg	Ser 105	Gly	Arg	Ala	Arg	Val 110	His	Val
Ser	Glu	Glu 115	Gly	Thr	Glu	Pro	Glu 120	Ala	Met	Leu	Gln	Val 125	Leu	Gly	Pro
Lys	Pro 130	Ala	Leu	Pro	Ala	Gly 135	Thr	Glu	Asp	Thr	Ala 140	Lys	Glu	Asp	Ala
Ala 145	Asn	Arg	Lys	Leu	Ala 150	Lys	Leu	Tyr	Lys	Val 155	Ser	Asn	Gly	Ala	Gly 160
-				165			Ala		170					175	
			180				Phe	185					190		
		195					Lys 200					205			
	210		•			215	Asp				220		-	_	
225					230		Leu			235					240
	_			245			Trp		250					255	
	_		260	-			Ser	265					270		
		275					His 280					285			
	290					295	Thr				300				
305					310		Val			315					320
ľyr	Gly	Gly	Asp	Xaa 325	Tyr	Ile	Ile	Leu	Tyr 330	Asn	Tyr	Arg	Hís	Gly 335	Gly

Arg	Gln	Gly	Gln 340	Ile	Ile	Tyr	Asn	Trp 345	Gln	Gly	Ala	Gln	Ser 350	Thr	Gln
Asp	Glu	Val 355	Ala	Ala	Ser	Ala	Ile 360	Leu	Thr	Ala	Gln	Leu 365	Asp	Glu	Glu
Leu	Gly 370	Gly	Thr	Pro	Val	Gln 375	Ser	Arg	Val	Val	Gln 380	Gly	Lys	Glu	Pro
Ala 385	His	Leu	Met	Ser	Leu 390	Phe	Gly	Gly	Lys	Pro 395	Met	Ile	Ile	Tyr	Lys 400
_	_			405	Glu	_	_		410					415	
			420		Ala			425					430		
		435			Gly		440					445			
	450				Ala	455					460				
465					Ala 470					475					480
				485	Glu				490					495	
			500		Ala			505					510		
_		515			Pro		520				_	525		_	
•	530	٠			Glu	535			-		540				_
545					Val 550				_	555					560
				565	Asp				570		_			575	
			580		Tyr			585					590		
Arg	rnr	970 595	TTE	Thr	Val	val	Lys 600	GIn	GTÅ	ьие	GIU	Pro 605	PLO	ser	rne

Val Gly Trp Phe Leu Gly Trp Asp Asp Asp Tyr Trp Ser Val Asp Pro 610 615 620

Leu Asp Arg Ala Met Ala Glu Leu Ala Ala 625 630

<210> 1066

<211> 117

<212> PRT

<213> Homo sapiens

<400> 1066

Arg Ala Arg Gly Arg Cys Arg Arg Ser Pro Asp Gly Val Gly Ile Glu
1 5 10 15

Ala Pro Arg Lys Lys Val Lys Tyr Gln Glu Ile Gln Val Glu Glu Pro 20 25 30

Tyr Tyr Asp Cys His Glu Cys Thr Glu Thr Phe Thr Ser Ser Thr Ala 35 40 45

Phe Ser Glu His Leu Lys Thr His Ala Ser Met Ile Ile Phe Glu Pro 50 55 60

Ala Asn Ala Phe Gly Glu Cys Ser Gly Tyr Ile Glu Arg Ala Ser Thr 65 70 75 80

Ser Thr Gly Gly Ala Asn Gln Ala Asp Glu Lys Tyr Phe Lys Cys Asp 85 90 95

Val Cys Gly Gln Leu Phe Asn Asp Arg Leu Ser Leu Ala Arg His Gln 100 105 110

Asn Thr His Thr Gly 115

<210> 1067

<211> 192

<212> PRT

<213> Homo sapiens

<400> 1067

Pro Glu Gln Arg Gly Ser Ser Met Ala His Gly Pro Gly Ala Leu Met
1 5 10 15

Leu Lys Cys Val Val Val Gly Asp Gly Ala Val Gly Lys Thr Cys Leu
20 25 30

1055

Leu Met Ser Tyr Ala Asn Asp Ala Phe Pro Glu Ser Thr Cys Pro Pro 40 Ser Ser Thr Thr Gln Glu Asp Tyr Asp Arg Leu Arg Pro Leu Ser Tyr Pro Met Thr Asp Val Phe Leu Ile Cys Phe Ser Val Val Asn Pro 75 70 Ala Ser Phe Gln Asn Val Lys Glu Glu Trp Val Pro Glu Leu Lys Glu 90 Tyr Ala Pro Asn Val Pro Phe Leu Leu Ile Gly Thr Gln Ile Asp Leu 105 Arg Asp Asp Pro Lys Thr Leu Ala Arg Leu Asn Asp Met Lys Glu Lys 120 115 Pro Ile Cys Val Glu Gln Gly Gln Lys Leu Ala Lys Glu Ile Gly Ala 135 Cys Cys Tyr Val Glu Cys Ser Ala Leu Thr Gln Lys Gly Leu Lys Thr 150 155 Val Phe Asp Glu Ala Ile Ile Ala Ile Leu Thr Pro Lys Lys His Thr 170 Val Lys Lys Arg Ile Gly Ser Arg Cys Ile Asn Cys Cys Leu Ile Thr

<210> 1068

<211> 360

<212> PRT

<213> Homo sapiens

<400> 1068

Ser Arg Trp Ala Arg Arg Asp Pro Gln Glu Arg Arg Glu Arg Gly Thr
1 5 10 15

185

Arg Val Gln Ser Ser Gly Thr Trp Ile Gly Ala Gly Ala Met Gly Gly 20 25 30

Glu Glu Glu Glu Arg Phe Asp Gly Met Leu Leu Ala Met Ala Gln
35 40 45

Gln	His 50	Glu	Gly	Gly	Val	Gln 55	Glu	Leu	Val	Asn	Thr 60	Phe	Phe	Ser	Phe
Leu 65	Arg	Arg	Lys	Thr	Asp 70	Phe	Phe	Ile	Gly	Gly 75	Glu	Glu	Gly	Met	Ala 80
Glu	Lys	Leu	Ile	Thr 85	Gln	Thr	Phe	Ser	His 90	His	Asn	Gln	Leu	Ala 95	Gln
Lys	Thr	Arg	Arg 100	Glu	Lys	Arg	Ala	Arg 105	Gln	Glu	Ala	Glu	Arg 110	Arg	Glu
Lys	Ala	Glu 115	Arg	Ala	Ala	Arg	Leu 120	Ala	Lys	Glu	Ala	Lys 125	Ser	Glu	Thr
Ser	Gly 130	Pro	Gln	Ile	Lys	Glu 135	Leu	Thr	Asp	Glu	Glu 140	Ala	Glu	Arg	Leu
Gln 145	Leu	Glu	Ile	Asp	Gln 150	Lys	Lys	Asp	Ala	Glu 155	Asn	His	Glu	Ala	Gln 160
Leu	Lys	Asn	Gly	Ser 165	Leu	Asp	Ser	Pro	Gly 170	Lys	Gln	Asp	Thr	Glu 175	Glu
Asp	Glu	Glu	Glu 180	Asp	Glu	Lys	Asp	Lys 185	Gly	Lys	Leu	Lys	Pro 190	Asn	Leu
Gly	Asn	Gly 195	Ala	Asp	Leu	Pro	Asn 200	Tyr	Arg	Trp	Thr	Gln 205	Thr	Leu	Ser
Glu	Leu 210	Asp	Leu	Ala	Val	Pro 215	Phe	Cys	Val	Asn	Phe 220	Arg	Leu	ГÀЗ	Gly
Lys 225	Asp	Met	Val	Val	Asp 230	Ile	Gln	Arg	Arg	His 235	Leu	Arg	Val	Gly	Leu 240
_	_			245	Ile		-	_	250					255	
Val	Glu	Glu	Ser 260	Ser	Trp	Leu	Ile	Glu 265	Asp	Gly	Lys	Val	Val 270	Thr	Val
His	Leu	Glu 275	Lys	Ile	Asn	Lys	Met 280	Glu	Trp	Trp	Ser	Arg 285	Leu	Val	Ser
Ser	Asp 290	Pro	Glu	Ile	Asn	Thr 295	Lys	Lys	Ile	Asn	Pro 300	Glu	Asn	Ser	Lys
Leu 305	Ser	Asp	Leu	Asp	Ser 310	Glu	Thr	Arg	Ser	Met 315	Val	Glu	Lys	Met	Met 320

Tyr Asp Gln Arg Gln Lys Ser Met Gly Leu Pro Thr Ser Asp Glu Gln 325 330 335

Lys Lys Gln Glu Ile Leu Lys Lys Phe Met Asp Gln His Pro Glu Met 340 345 350

Asp Phe Ser Lys Ala Lys Phe Asn 355 360

<210> 1069

<211> 174

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (52)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1069

Val Trp Leu Ser Trp Asp Gln Glu Lys Ile Pro Val Leu Asp Gln Glu
1 5 10 15

Ala Ala Asp Gly Ser Ser Thr Leu Gly Gly Gly Ala Gly Thr Met Gly 20 25 30

Leu Ser Ala Arg Tyr Gly Pro Gln Phe Thr Leu Gln His Val Pro Asp
35 40 45

Tyr Arg Gln Xaa Val Tyr Ile Pro Gly Ser Asn Ala Thr Leu Thr Asn 50 55 60

Ala Ala Gly Lys Arg Gly Trp Gln Gly Pro Ser Arg Trp Gln Trp Gln, 65 70 75 80

Gln Glu Glu Val Gly Gln Glu Glu Glu Val Thr Trp Arg Pro Gly
85 90 95

Gln Glu Pro Gln Gly Gly Leu Ser Pro Thr Ser Pro Ala Ser Pro Tyr
100 . 105 110

Leu His Pro Gly Leu Arg Val Ser Gly Leu Thr Pro Arg Ile Leu Val 115 120 125

Gly Ala Lys Ala Met Leu Pro Leu Gly Asn Arg Asn Lys Cys Pro Val 130 135 140

Ser Thr Tyr Pro Phe Pro Pro Arg Gly Leu Asn Met Gln Lys Gln Phe 145 . 150 . 155 . 160

Arg Trp Glu Pro Pro Ser Asn Gln Leu Leu Tyr Pro Trp Gly
165 170

<210> 1070

<211> 445

<212> PRT

<213> Homo sapiens

<400> 1070

Pro Arg Gly Leu Thr Gly Leu Trp Arg Ser Ser Leu Pro Ile Arg Lys

1 10 15

Leu Gln Leu Pro Pro Asp Ala Leu Lys Met Ala Thr Ser Leu Gly Ser 20 25 30

Cys Gln Thr Cys Leu Gly Glu Asn Pro Tyr Ile Arg Met Thr Lys Glu
50 55 60

Lys Tyr Gly Lys Glu Cys Lys Ile Cys Ala Arg Pro Phe Thr Val Phe 65 70 75 80

Arg Trp Cys Pro Gly Val Arg Met Arg Phe Lys Lys Thr Glu Val Cys
85 90 95

Gln Thr Cys Ser Lys Leu Lys Asn Val Cys Gln Thr Cys Leu Leu Asp 100 105 110

Leu Glu Tyr Gly Leu Pro Ile Gln Val Arg Asp Ala Gly Leu Ser Phe 115 120 125

Lys Asp Asp Met Pro Lys Ser Asp Val Asn Lys Glu Tyr Tyr Thr Gln 130 135 140

Asn Met Glu Arg Glu Ile Ser Asn Ser Asp Gly Thr Arg Pro Val Gly 145 150 155 160

Met Leu Gly Lys Ala Thr Ser Thr Ser Asp Met Leu Leu Lys Leu Ala 165 170 175

Arg Thr Thr Pro Tyr Tyr Lys Arg Asn Arg Pro His Ile Cys Ser Phe 180 185 190

Trp Val Lys Gly Glu Cys Lys Arg Gly Glu Glu Cys Pro Tyr Arg His 195 200 205

1059

Glu	Lys 210	Pro	Thr	Asp	Pro	Asp 215	Asp	Pro	Leu	Ala	220	Gln	Asn	Ile	Lys
Asp 225	Arg	Tyr	Tyr	Gly	11e 230	Asn	Asp	Pro	Val	Ala 235	Asp	Lys	Leu	Leu	Lys 240
Arg	Ala	Ser	Thr	Met 245	Pro	Arg	Leu	Asp	Pro 250	Pro	Glu	Asp	Lys	Thr 255	Ile
Thr	Thr	Leu	Tyr 260	Val	Gly	Gly	Leu	Gly 265	Asp	Thr	Ile	Thr	Glu 270	Thr	Asp
Leu	Arg	Asn 275	His	Phe	Tyr	Gln	Phe 280	Gly	Glu	Ile	Arg	Thr 285	Ile	Thr	Val
Val	Gln 290	Arg	Gln	Gln	Cys	Ala 295	Phe	Ile	Gln	Phe	Ala 300	Thr	Arg	Gln	Ala
Ala 305	Glu	Val	Ala	Ala	Glu 310	Lys	Ser	Phe	Asn	Lys 315		Ile	Val	Asn	Gly 320
Arg	Arg	Leu	Asn	Val 325	Lys	Trp	Gly	Arg	Ser 330	Gln	Ala	Ala	Arg	Gly 335	Lys
Glu	Lys	Glu	Lys 340	Asp	Gly	Thr	Thr	Asp 345	Ser	Gly	Ile	Lys	Leu 350	Glu	Pro
Val	Pro	Gly 355	Leu	Pro	Gly	Ala	Leu 360	Pro	Pro	Pro	Pro	Ala 365	Ala	Glu	Glu
Glu	Ala 370	Ser	Ala	Asn	Tyr	Phe 375	Asn	Leu	Pro	Pro	Ser 380	Gly	Pro	Pro	Ala
Val 385	Val	Asn	Ile	Ala	Leu 390	Pro	Pro	Pro	Pro	Gly 395	Ile	Ala	Pro	Pro	Pro 400
Pro	Pro	Gly	Phe	Gly 405	Pro	His	Met	Phe	His 410	Pro	Met	Gly	Pro	Pro 415	Pro
Pro	Phe	Met	Arg 420	Ala	Pro	Gly	Pro	Ile 425		Tyr	Pro	Ser	Gln 430	Asp	Pro
Gln		Met		Ala	His		Gly		His	Ser	Ser	Pro			

<210> 1071

<211> 346

<212> PRT

<213> Homo sapiens

WO 00/55350

<220> <221> SITE <222> (286) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (287) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (291) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (294) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1071 Trp Ser Arg Leu Cys Leu Leu Lys Gln Tyr Leu Phe Thr Met Lys Leu 10 Gln Ser Pro Glu Phe Gln Ser Leu Phe Thr Glu Gly Leu Lys Ser Leu Thr Glu Leu Phe Val Lys Glu Asn His Glu Leu Arg Ile Ala Gly Gly Ala Val Arg Asp Leu Leu Asn Gly Val Lys Pro Gln Asp Ile Asp Phe Ala Thr Thr Ala Thr Pro Thr Gln Met Lys Glu Met Phe Gln Ser Ala . 75 70 Gly Ile Arg Met Ile Asn Asn Arg Gly Glu Lys His Gly Thr Ile Thr 85 90 Ala Arg Leu His Glu Glu Asn Phe Glu Ile Thr Thr Leu Arg Ile Asp 105 Val Thr Thr Asp Gly Arg His Ala Glu Val Glu Phe Thr Thr Asp Trp 120 Gln Lys Asp Ala Glu Arg Arg Asp Leu Thr Ile Asn Ser Met Phe Leu Gly Phe Asp Gly Thr Leu Phe Asp Tyr Phe Asn Gly Tyr Glu Asp Leu 145 150 155

1061

Lys Asn Lys Lys Val Arg Phe Val Gly His Ala Lys Gln Arg Ile Gln 170 Glu Asp Tyr Leu Arg Ile Leu Arg Tyr Phe Arg Phe Tyr Gly Arg Ile 185 Val Asp Lys Pro Gly Asp His Asp Pro Glu Thr Leu Glu Ala Ile Ala 200 Glu Asn Ala Lys Gly Leu Ala Gly Ile Ser Gly Glu Arg Ile Trp Val 215 Glu Leu Lys Lys Ile Leu Val Gly Asn His Val Asn His Leu Ile His 230 235 Leu Ile Tyr Asp Leu Asp Val Ala Pro Tyr Ile Gly Leu Pro Ala Asn 245 Ala Ser Leu Glu Glu Phe Asp Lys Val Ser Lys Asn Val Asp Gly Phe 265 Ser Pro Lys Pro Val Thr Leu Leu Ala Ser Leu Phe Lys Xaa Xaa Asp 280 275 Asp Val Xaa Lys Leu Xaa Leu Arg Leu Lys Ile Ala Lys Glu Glu Lys 295 Asn Leu Gly Leu Phe Ile Val Lys Asn Arg Lys Asp Leu Ile Lys Ala 315 Thr Asp Ser Ser Asp Pro Leu Lys Pro Tyr Gln Asp Phe Ile Ile Asp 325 Ser Arg Glu Pro Asp Ala His Ser Cys Met 340 <210> 1072

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<211> 404
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (77)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
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	3> Xa	•	quals	any	of	the	nati	ıral	Ly o	cur	ring	L-ar	nino	acio	is
<400)> 1(72													
3lu 1	Asp	Ser	Leu	Asn 5	Leu	Asp	Leu	Thr	Pro 10	Arg	Met	Leu	Arg	Arg 15	Leu
Leu	Glu	Arg	Pro 20	Суз	Thr	Leu	Ala	Leu 25	Leu	Val	Gly	Ser	Gln 30	Leu	Ala
Val	Met	Met 35	Tyr	Leu	Ser	Leu	Gly 40	Gly	Phe	Arg	Ser	Leu 45	Ser	Ala	Leu
Phe	Gly 50	Arg	Asp	Gln	Gly	Pro 55	Thr	Phe	Asp	Tyr	Ser 60	His	Pro	Arg	Asp
Val 65	Tyr	Ser	Asn	Leu	Ser 70	His	Leu	Pro	Gly	Ala 75	Pro	Xaa	Gly	Pro	Pro 80
Kaa	Pro	Gln	Gly	Leu 85	Pro	Tyr	Cys	Pro	Glu 90	Arg	Ser	Pro	Leu	Leu 95	Val
Gly	Pro	Val	Ser 100	Val	Ser	Phe	Ser	Pro 105	Val	Pro	Ser	Leu	Ala 110	Glu	Ile
Val	Glu	Arg 115	Asn	Pro	Arg	Val	Glu 120	Pro	Gly	Gly	Arg	Туг 125	Arg	Pro	Ala
Sly	Cys 130	Glu	Pro	Arg	Ser	Arg 135	Thr	Ala	Ile	Ile	Val 140	Pro	His	Arg	Ala
Arg 145		His	His	Leu	Arg 150	Leu	Leu	Leu	туг	His 155	Leu	His	Pro	Phe	Leu 160
3ln	Arg	Gln	Gln	Leu 165	Ala	туг	Gly	Ile	Tyr 170	Val	Ile	His	Gln	Ala 175	Gly
Asn	Gly	Thr	Phe 180	Asn	Arg	Ala	Lys	Leu 185	Leu	Asn	Val	Gly	Val 190	Arg	Glu
Ala	Leu	Arg 195	Asp	Glu	Glu	Trp	Asp 200	Суз	Leu	Phe	Leu	His 205	Asp	Val	Asp
Leu	Leu 210	Pro	Glu	Asn	Asp	His 215	Asn	Leu	туг	Val	Cys 220	Asp	Pro	Arg	Gly
Pro 225	Arg	His	Val	Ala	Val 230	Ala	Met	Asn	Lys	Phe 235	Gly	туг	Ser	Leu	Pro 240
yr	Pro	Gln	Tyr	Phe 245	Gly	.Gly	Val	Ser	Ala 250	Leu	Thr	Pro	Asp	Gln 255	Tyr

Leu Lys Met Asn Gly Phe Pro Asn Glu Tyr Trp Gly Trp Gly Glu Glu 260 265 Asp Asp Asp Ile Ala Thr Arg Val Arg Leu Ala Gly Met Lys Ile Ser 280 Arg Pro Pro Thr Ser Val Gly His Tyr Lys Met Val Lys His Arg Gly Asp Lys Gly Asn Glu Glu Asn Pro His Arg Phe Asp Leu Leu Val Arg Thr Gln Asn Ser Trp Thr Gln Asp Gly Met Asn Ser Leu Thr Tyr Gln 330 325 Leu Leu Ala Arg Glu Leu Gly Pro Leu Tyr Thr Asn Ile Thr Ala Asp 340 345 Ile Gly Thr Asp Pro Arg Gly Pro Arg Ala Pro Ser Gly Pro Arg Tyr 360 Pro Pro Gly Ser Ser Gln Ala Phe Arg Gln Glu Met Leu Gln Arg Arg Pro Pro Ala Arg Pro Gly Pro Leu Ser Thr Ala Asn His Thr Ala Leu 385 390 395 Arg Gly Ser His

<210> 1073

<211> 217

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (68)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1073

Asn Lys Glu Gln Leu Met Asp Lys Ser Gly Ile Asp Ser Leu Asp His 1 5 10 15

Val Thr Ser Asp Ala Val Glu Leu Ala Asn Arg Ser Asp Asn Ser Ser

Asp Ser Ser Leu Phe Lys Thr Gln Cys Ile Pro Tyr Ser Pro Lys Gly

35 40 45 Glu Lys Arg Asn Pro Ile Arg Lys Phe Val Arg Thr Pro Glu Ser Val 55 His Ala Ser Xaa Ser Ser Ser Asp Ser Ser Phe Glu Pro Ile Pro Leu Thr Ile Lys Ala Ile Phe Glu Arg Phe Lys Asn Arg Lys Lys Arg Tyr Lys Lys Lys Lys Arg Arg Tyr Gln Pro Thr Gly Arg Pro Arg Gly 100 105 Arg Pro Glu Gly Arg Arg Asn Pro Ile Tyr Ser Leu Ile Asp Lys Lys 120 Lys Gln Phe Arg Ser Arg Gly Ser Gly Phe Pro Phe Leu Glu Ser Glu 135 Asn Glu Lys Asn Ala Pro Trp Arg Lys Ile Leu Thr Phe Glu Gln Ala 150 Val Ala Arg Gly Phe Phe Asn Tyr Ile Glu Lys Leu Lys Tyr Glu His His Leu Lys Glu Ser Leu Lys Gln Met Asn Val Gly Glu Asp Leu Glu 180 185 Asn Glu Asp Phe Asp Ser Arg Arg Tyr Lys Phe Leu Asp Asp Asp Gly 200 Ser Ile Ser Pro Ile Glu Glu Ser Thr 210 215 <210> 1074 <211> 161 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (110) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE

<223> Xaa equals any of the naturally occurring L-amino acids

<222> (122)

<22	0>														
<22	1> S	ITE													
<22	2> (123)													
<22	3> X	aa e	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
<22															
<22	1> S	ITE													
<22	2> (125)													
<22	3> X	aa e	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
<22	_														
<22	1> S	ITE													
	•	128)													
<22	3> X	aa e	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
<22															
	1> S														
	2> (-			_			_							
<22	3> X	aa e	qual:	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	acio	is
-40															
	0> 1				_			_		_					
	HIS	туг	Arg		гàг	ьел	Val	Arg			GLY	Thr	GIY		GTĀ
1				5					10					15	
n a n	Com	3	***	3	D	3	*** 7	3	~1	~1 ·	D	C	D-1-		
ASI	ser	Arg		Asp	Pro	Arg	Val	_	GIU	GIN	Pro	ser		Ala	ser
			20					25					30		
C0=	210	D=0	C1	C1-	T	3.00	Co	C	c1-	3.00	**- 1	T	D	21-	63.
ser	WIG		GTĀ	GIII	reu	ASII	Ser 40	Cys	GIU	Asp	vai	45	PIO	ATA	GIU
		35					40					45			
Dro	71-	7 T -	1757	Dro	mh ∽	Dro	Thr	Cln	1707	5a=	7 011	mb =	Cl n	**-1	Co=
PIO	50	AIA	Val	PLO	TIII	55	TIIL	GIII	val	Ser	60	1111	GIII	vaı	ser
	30				•	33					80				
Pro	T.ve	Glu	Pro	Ser	Thr	Va 1	Ser	λla	Sor	Ser	Dhe	T.en	Trn	T.Ou	Cue
65	n, s	OLU	110	561	70	V 41	Der	ALU	Der	75	1110	200	.119	БСи	80
0.5					, 0					,,					80
Pro	T.vc	Len	Tro	Glv	T.e.u	Trn	Pro	Ser	Ser	Glu	Glv	Glv	Cve	Dhe	T.em
	5 73	Deu	115	85	Deu	TIP	110	Ser	90	GIU	GLY	GLY	Cys	95	Leu
									,,					,,	
Asn	His	His	Ara	Arg	His	His	Arg	Cvs	Ara	Ara	Gln	Ara	Xaa	Asn	Ser
			100				•••-9	105	9	9	·		110		501
								100					110		
Cvs	Asp	Ara	Ala	Va 1	Val	Ser	Lys	Δla	Yaa	Yaa	T.e.II	Yaa	a l a	Δla	Yaa
- 10		115	77.4	Vul	var	001	120	AIG	лии	naa	пси	125	nia	ALG	Add
							140					14.7			
Phe	Trp	G) v	Len	Len	Leu	De	Gln	Tle	Len	Met	Lev	Ara	Gln	Ala	Tle
	130	1	~~u	204		135	-411	116	Leu		140	9	~111		116
Phe	Gly	Xaa	Asn	Lys	Asn	Ser	Gln	Glu	Ala	Lvs	Asn	Ser	Pro	Ile	Trp
145	-				150					155					160

Lys

)> 10														
	L> 22														
<212	2> PI	RT													
<213	3> Ho	omo s	sapie	ens											
)> 10		_						••- 3	-	mh		*	01 -	mh
	Ser	ser	Trp		Ala	Arg	Tyr	Thr		Leu	Thr	Tyr	Leu		Thr
1				5					10					15	
Met	Val	Phe	Tyr 20	Asn	Leu	Phe	Ile	Phe 25	Leu	Asn	Asn	Glu	Asp 30	Ala	Val
Lys	Asp	Ile 35	Arg	Trp	Leu	Val	Ile 40	Ser	Leu	Leu	Glu	Asp 45	Glu	Gln	Leu
Glu	Val 50	Arg	Glu	Met	Ala	Ala 55	Thr	Thr	Leu	Ser	Gly 60	Leu	Leu	Gln	Cys
Asn 65	Phe	Leu	Thr	Met	Asp 70	Ser	Pro	Met	Gln	Ile 75	His	Phe	Glu	Gln	Leu 80
Cys	Lys	Thr	Lys	Leu 85	Pro	Lys	Lys	Arg	Lys 90	Arg	Asp	Pro	Gly	Ser 95	Val
Gly	Asp	Thr	Ile 100	Pro	Ser	Ala	Glu	Leu 105	Val	Lys	Arg	His	Ala 110	Gly	Val
Leu	Gly	Leu 115	Gly	Ala	Суз	Val	Leu 120	Ser	Ser	Pro	Tyr	Asp 125	Val	Pro	Thr
Trp	Met 130	Pro	Gln	Leu	Leu	Met 135	Asn	Leu	Ser	Ala	His 140	Leu	Asn	Asp	Pro
Gln 145	Pro	Ile	Glu	Met	Thr 150	Val	Lys	Lys	Thr	Leu 155	Ser	Asn	Phe	Arg	Arg 160
Leu	Thr	Met	Thr	Thr 165	Gly	Arg	Asn	Ile	Asn 170	Ser	Asn	Ser	Leu	Met 175	Thr
Asn	Cys	Leu	Phe 180	Ser	Pro	Ile	Phe	Leu 185	Cys	His [.]	His	Ala	Ile 190	Met	His
Arg	Lys	Met 195	Thr	Ser	Pro	His	Phe 200	Arg	Leu	Phe	Ser	Ser 205	Lys	Ile	Pro

210

1067

220

His Pro Gln Val Pro Ser Val Val Ala Leu Cys Lys Phe

215

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<210> 1076
<211> 166
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (135)
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<220>
<221> SITE
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<220>
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<222> (166)
<223> Xaa equals any of the naturally occurring L-amino acids
Ala Arg Gly Ala Arg Val Arg Ala Cys Ala Ser Leu Gly Ser Trp Arg
Gly Pro Arg Gly Glu Gly Trp Lys Met Ser Met Asp Val Thr Phe Leu
                                25
Gly Thr Gly Ala Ala Tyr Pro Ser Pro Thr Arg Gly Ala Ser Ala Val
Val Leu Arg Cys Glu Gly Glu Xaa Trp Leu Phe Asp Cys Gly Glu Gly
Thr Gln Thr Gln Leu Met Lys Ser Gln Leu Lys Ala Gly Arg Ile Thr
                     70
Lys Ile Phe Ile Thr His Leu His Gly Asp His Phe Gly Leu Pro
Gly Leu Leu Cys Thr Ile Ser Leu Gln Ser Gly Ser Met Val Ser Lys
```

105

Gln Pro Ile Glu Ile Tyr Gly Pro Val Gly Phe Gly Thr Leu Ser Gly

120 Glu Pro Trp Asn Ser Leu Xaa Arg Glu Leu Val Phe His Tyr Val Val His Glu Leu Val Pro Thr Ala Asp Gln Cys Pro Ala Glu Gly Thr Lys Arg Ile Xaa Ala Cys Xaa <210> 1077 <211> 239 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (25) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1077 Gly Leu Arg Ala Leu Ser Gln His Thr Asp Leu Ser Pro Leu Ser Pro Lys Thr Pro Ala Pro Ser Met Arg Xaa Lys Met Gly Asn Gly Thr Glu Glu Asp Tyr Asn Phe Val Phe Lys Val Val Leu Ile Gly Glu Ser Gly 40 Val Gly Lys Thr Asn Leu Leu Ser Arg Phe Thr Arg Asn Glu Phe Ser 50 55 His Asp Ser Arg Thr Thr Ile Gly Val Glu Phe Ser Thr Arg Thr Val Met Leu Gly Thr Ala Ala Val Lys Ala Gln Ile Trp Asp Thr Ala Gly Leu Glu Arg Tyr Arg Ala Ile Thr Ser Ala Tyr Tyr Arg Gly Ala Val 100 Gly Ala Leu Leu Val Phe Asp Leu Thr Lys His Gln Thr Tyr Ala Val

120

Val Glu Arg Trp Leu Lys Glu Leu Tyr Asp His Ala Glu Ala Thr Ile

1069

130 135 140 Val Val Met Leu Val Gly Asn Lys Ser Asp Leu Ser Gln Ala Arg Glu 150 155 Val Pro Thr Glu Glu Ala Arg Met Phe Ala Glu Asn Asn Gly Leu Leu 165 170 Phe Leu Glu Thr Ser Ala Leu Asp Ser Thr Asn Val Glu Leu Ala Phe 185 Glu Thr Val Leu Lys Glu Ile Phe Ala Lys Val Ser Lys Gln Arg Gln 195 200 Asn Ser Ile Arg Thr Asn Ala Ile Thr Ser Gly Ser Ala Gln Ala Gly Gln Glu Pro Gly Pro Gly Glu Lys Arg Ala Cys Cys Ile Ser Leu 235 <210> 1078 <211> 171 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (123) <223> Xaa equals any of the naturally occurring L-amino acids Ile Leu Lys Gly Ser Ser Gly Ser Val Trp Leu Arg Asn Leu Gln Leu Gly Leu Phe Gly Thr Ala Leu Gly Leu Val Gly Leu Trp Trp Ala Glu 25 Gly Thr Ala Val Ala Thr Arg Gly Phe Phe Phe Gly Tyr Thr Pro Ala 40 45 Val Trp Gly Val Val Leu Asn Gln Ala Phe Gly Gly Leu Leu Val Ala Val Val Val Lys Tyr Ala Asp Asn Ile Leu Lys Gly Phe Ala Thr Ser 75 Leu Ser Ile Val Leu Ser Thr Val Ala Ser Ile Arg Leu Phe Gly Phe 85

His Val Asp Pro Leu Phe Ala Leu Gly Ala Gly Leu Val Ile Gly Ala 100 105 Val Tyr Leu Tyr Ser Leu Pro Arg Gly Ala Xaa Lys Ala Ile Ala Ser 120 Ala Ser Ala Ser Ala Ser Gly Pro Cys Val His Gln Gln Pro Pro Gly 135 Gln Pro Pro Pro Pro Gln Leu Ser Ser His Arg Gly Asp Leu Ile Thr 150 155 Glu Pro Phe Leu Pro Lys Ser Val Leu Val Lys 165 170 <210> 1079 <211> 141 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (59) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1079 Arg Arg Val Cys His Ser Ser Pro His Leu Ser Ser Pro Arg Ala Ala 1 5 10 Cys Glu Gln Gln Ala Val Ala Leu Thr Leu Gln Glu Asp Arg Ala Ser Leu Thr Leu Ser Gly Gly Pro Ser Ala Leu Ala Phe Asp Leu Ser Lys Val Pro Gly Pro Glu Ala Ala Pro Arg Leu Xaa Ala Leu Thr Leu Gly 50 55 Leu Ala Lys Arg Val Trp Ser Leu Glu Arg Arg Leu Ala Ala Glu

Glu Thr Ala Val Ser Pro Arg Lys Ser Pro Arg Pro Ala Gly Pro Gln
85 90 95

Leu Phe Leu Pro Asp Pro Asp Pro Gln Arg Gly Gly Pro Gly 100 105 110

Val Arg Arg Cys Pro Gly Glu Ser Leu Ile Asn Pro Gly Phe Lys 115 120 125 Ser Lys Lys Pro Ala Gly Gly Val Asp Phe Asp Glu Thr 130 135 140

<210> 1080

<211> 359

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1080

Ala Val Glu Ser Arg Xaa Pro Gly Trp Asn His His Gly Ile Gln Phe
1 5 10 15

Pro Cys Gly Ser Val Trp Leu Glu His Ala Ile Ala Met Ile Cys Gly
20 25 30

Asn Val Cys Leu Trp Lys Gly Ala Pro Thr Thr Ser Leu Ile Ser Val
35 40 45

Ala Val Thr Lys Ile Ile Ala Lys Val Leu Glu Asp Asn Lys Leu Pro 50 60

Gly Ala Ile Cys Ser Leu Thr Cys Gly Gly Ala Asp Ile Gly Thr Ala 65 70 75 80

Met Ala Lys Asp Glu Arg Val Asn Leu Leu Ser Phe Thr Gly Ser Thr 85 90 95

Gln Val Gly Lys Gln Val Gly Leu Met Val Gln Glu Arg Phe Gly Arg 100 105 110

Ser Leu Leu Glu Leu Gly Gly Asn Asn Ala Ile Ile Ala Phe Glu Asp 115 120 125

Ala Asp Leu Ser Leu Val Val Pro Ser Ala Leu Phe Ala Ala Val Gly
130 135 140

Thr Ala Gly Gln Arg Cys Thr Thr Ala Arg Arg Leu Phe Ile His Glu 145 150 155 160

Ser Ile His Asp Glu Val Val Asn Arg Leu Lys Lys Ala Tyr Ala Gln 165 170 175

Ile Arg Val Gly Asn Pro Trp Asp Pro Asn Val Leu Tyr Gly Pro Leu

1072

190

185

His Thr Lys Gln Ala Val Ser Met Phe Leu Gly Ala Val Glu Glu Ala 195 200 Lys Lys Glu Gly Gly Thr Val Val Tyr Gly Gly Lys Val Met Asp Arg Pro Gly Asn Tyr Val Glu Pro Thr Ile Val Thr Gly Leu Gly His Asp 230 235 Ala Ser Ile Ala His Thr Glu Thr Phe Ala Pro Ile Leu Tyr Val Phe 245 250 Lys Phe Lys Asn Glu Glu Glu Val Phe Ala Trp Asn Asn Glu Val Lys 265 Gln Gly Leu Ser Ser Ser Ile Phe Thr Lys Asp Leu Gly Arg Ile Phe Arg Trp Leu Gly Pro Lys Gly Ser Asp Cys Gly Ile Val Asn Val Asn Ile Pro Thr Ser Gly Ala Glu Ile Gly Gly Ala Phe Gly Glu Lys 310 315 His Thr Gly Gly Gly Arg Glu Ser Gly Ser Asp Ala Trp Lys Gln Tyr 325 Met Arg Arg Ser Thr Cys Thr Ile Asn Tyr Ser Lys Asp Leu Pro Leu 345 Ala Gln Gly Ile Lys Phe Gln <210> 1081 <211> 138 <212> PRT <213> Homo sapiens <400> 1081 Ala Val Pro Leu Leu Gly Arg Pro Thr Arg Pro Val Gly Pro Arg Ala 5 Ala Leu Thr Met Thr Gln Gln Gly Ala Ala Leu Gln Asn Tyr Asn Asn Glu Leu Val Lys Cys Ile Glu Glu Leu Cys Gln Lys Arg Glu Glu Leu

Cys Arg Gln Ile Gln Glu Glu Asp Glu Lys Gln Arg Leu Gln Asn 50 55 60

Glu Val Arg Gln Leu Thr Glu Lys Leu Ala Arg Val Asn Glu Asn Leu 65 70 75 80

Ala Arg Lys Ile Ala Ser Arg Asn Glu Phe Asp Arg Thr Ile Ala Glu 85 90 95

Thr Glu Ala Ala Tyr Leu Lys Ile Leu Glu Ser Ser Gln Thr Leu Leu 100 105 110

Ser Val Leu Lys Arg Glu Ala Gly Asn Leu Thr Lys Ala Thr Ala Pro 115 120 125

Asp Gln Lys Ser Ser Gly Gly Arg Asp Ser 130 135

<210> 1082

<211> 339

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (42)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1082

Ser Pro Ile Ser Asn Cys Glu Ile Thr Ile Thr Asp Pro Gly Lys Phe
1 5 10 15

Tyr Asn Ser Asn Ser Val Phe Ser Arg Gly Asn Met Ala Lys Val Phe

Ser Phe Ile Leu Val Thr Thr Ala Leu Xaa Met Gly Arg Glu Ile Ser $35 \hspace{1cm} 40 \hspace{1cm} \cdot \hspace{1cm} 45$

Ala Leu Glu Asp Cys Ala Gln Glu Gln Met Arg Leu Arg Ala Gln Val 50 55 60

Arg Leu Leu Glu Thr Arg Val Lys Gln Gln Gln Val Lys Ile Lys Gln 65 70 75 80

Leu Leu Gln Glu Asn Glu Val Gln Phe Leu Asp Lys Gly Asp Glu Asn 85 90 95

Thr Val Val Asp Leu Gly Ser Lys Arg Gln Tyr Ala Asp Cys Ser Glu

1074

			100					105					110		
Ile	Phe	Asn 115	Asp	Gly	Tyr	Lys	Leu 120	Ser	Gly	Phe	Tyr	Lys 125	Ile	Lys	Pro
Leu	Gln 130	Ser	Pro	Ala	Glu	Phe 135	Ser	Val	Tyr	Cys	Asp 140	Met	Ser	Asp	Gly
Gly 145	Gly	Trp	Thr	Val	Ile 150	Gln	Arg	Arg	Ser	Asp 155	Gly	Ser	Glu	Asn	Phe 160
Asn	Arg	Gly	Trp	Lys 165	Asp	Tyr	Glu	Asn	Gly 170	Phe	Gly	Asn	Phe	Val 175	Gln
Lys	His	Gly	Glu 180	Tyr	Trp	Leu	Gly	Asn 185	Lys	Asn	Leu	His	Phe 190	Leu	Thr
Thr	Gln	Glu 195	Asp	Tyr	Thr	Leu	Lys 200	Ile	Asp	Leu	Ala	Asp 205	Phe	Glu	Lys
Asn	Ser 210	Arg	Tyr	Ala	Gln	Туг 215	Lys	Asn	Phe	Lys	Val 220	Gly	Asp	Glu	Lys
Asn 225	Phe	Tyr	Glu	Leu	Asn 230	Ile	Gly	Glu	Tyr	Ser 235	Gly	Thr	Ala	Gly	Asp 240
Ser	Leu	Ala	Gly	Asn 245	Phe	His	Pro	Glu	Val 250	Gln	Trp	Trp	Ala	Ser 255	His
Gln	Arg	Met	Lys 260	Phe	Ser	Thr	Trp	Asp 265	Arg	Asp	His	Asp	Asn 270	Tyr	Glu
Gly	Asn	Cys 275	Ala	Glu	Glu	Asp	Gln 280	Ser	Gly	Trp	Trp	Phe 285	Asn	Arg	Суз
His	Ser 290	Ala	Asn	Leu	Asn	Gly 295	Val	Tyr	Туг	Ser	Gly 300	Pro	Tyr	Thr	Ala
Lys 305	Thr	Asp	Asn	Gly	Ile 310	Val	Trp	туг	Thr	Trp 315	His	Gly	Trp	Trp	Tyr 320
Ser	Leu	Lys	Ser	val 325	Val	Met	Lys	Ile	Arg 330	Pro	Asn	Asp	Phe	Ile 335	Pro

Asn Val Ile

<210> 1083 <211> 256

	2> P1 3> H		sapi	ens											
<22 <22	0> 1> s:	ITE													
	2> (! 3> X	•	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-ai	mino	acio	ds
<10	0> 10	003													
			Asn	Gly 5	Pro	Ala	Asp	Phe	Glu 10	Lys	Arg	Val	Glu	Gly 15	Gly
Gly	Arg	Pro	Arg 20	Ala	Pro	Leu	Val	Asn 25	Ala	Leu	Leu	Thr	Ala 30	Pro	Glu
Phe	Leu	Ile 35	Tyr	Thr	Gly	Cys	Met 40	Val	Суз	Val	Phe	Leu 45	Phe	Cys	Phe
Ser	Pro 50	Pro	Ala	Gly	Leu	Phe 55	Xaa	Gly	Trp	Gly	Gly 60	Gly	Phe	Ala	Met
Ser 65	Asp	Asp	Asp	Ser	Arg 70	Ala	Ser	Thr	Ser	Ser 75	Ser	Ser	Ser	Ser	Ser 80
Ser	Asn	Gln	Gln	Thr 85	Glu	Lys	Glu	Thr	Asn 90	Thr	Pro	Lys	Lys	Lys 95	Glu
Ser	Lys	Val	Ser 100	Met	Ser	Lys	Asn	Ser 105	Lys	Leu	Leu	Ser	Thr 110	Ser	Ala
Lys	Arg	Ile 115	Gln	Lys	Glu	Leu	Ala 120	Asp	Ile	Thr	Leu	Asp 125	Pro	Pro	Pro
Asn	Cys 130	Ser	Ala	Gly	Pro	Lys 135	Gly	Asp	Asn	Ile	Tyr 140	Glu	Trp	Arg	Ser
Thr 145	Ile	Leu	Gly	Pro	Pro 150	Gly	Ser	Val	Tyr	Glu 155	Gly	Gly	Val	Phe	Phe
Leu	Asp	Ile	Thr	Phe 165	Thr	Pro	Glu	Tyr	Pro 170	Phe	Lys	Pro	Pro	Lys 175	Val
Thr	Phe	Arg	Thr 180	Arg	Ile	Tyr	His	Cys 185	Asn	Ile	Asn	Ser	Gln 190	Gly	Val
Ile	Cys	Leu 195	Asp	Ile	Leu	Lys	Asp 200	Asn	Trp	Ser	Pro	Ala 205	Leu	Thr	Ile

Ser Lys Val Leu Leu Ser Ile Cys Ser Leu Leu Thr Asp Cys Asn Pro

220

Ala Asp Pro Leu Val Gly Ser Ile Ala Thr Gln Tyr Met Thr Asn Arg 225 230 240

Ala Glu His Asp Arg Met Ala Arg Gln Trp Thr Lys Arg Tyr Ala Thr 245 250 250

<210> 1084 <211> 176 <212> PRT <213> Homo sapiens

<400> 1084

Glu Lys Cys Val Ser Phe Ser Ala Val Leu Lys Ser Leu Ser Pro Val
1 5 10 15

Asp Pro Val Glu Pro Ile Ser Asn Ser Glu Pro Ser Met Asn Ser Asp 20 25 30

Met Gly Lys Val Ser Lys Asn Asp Thr Glu Glu Glu Ser Asn Lys Ser 35 40 45

Ala Thr Thr Asp Asn Glu Ile Ser Arg Thr Glu Tyr Leu Cys Glu Asn 50 55 60

Ser Leu Glu Gly Lys Asn Lys Asp Asn Ser Ser Asn Glu Val Phe Pro 65 70 75 80

Gln Gly Ala Glu Glu Arg Met Cys Tyr Gln Cys Glu Ser Glu Asp Glu 85 90 95

Pro Gln Ala Asp Gly Ser Gly Leu Thr Thr Ala Pro Pro Thr Pro Arg

Asp Ser Leu Gln Pro Ser Ile Lys Gln Arg Leu Ala Arg Leu Gln Leu 115 120 125

Ser Pro Asp Phe Thr Phe Thr Ala Gly Leu Ala Ala Glu Val Ala Ala 130 135 140

Arg Ser Leu Ser Phe Thr Thr Met Gln Glu Gln Thr Phe Gly Asp Glu
145 150 155 160

Glu Glu Glu Gln Ile Ile Glu Glu Asn Lys Asn Glu Ile Glu Glu Lys 165 170 175

	0> 1														
	1> 2														
	2> P 3> #	omo	gani	eng											
72.1	J- 11	OMO	Sapı	CIIS											
<40	0> 1	085													
His	Arg	Lys	Ser	Arg	Pro	Ala	Asn	His	Cys	Val	Tyr	Phe	Tyr	Gly	Asp
1				5					10					15	
Glu	Ile	Ser		Ser	Cys	His	Glu		Ser	Arg	Phe	Ser		Ile	Cys
			20					25					30		
Gln	. Glv	Asn	Glv	Thr	Trn	Ser	Pro	Ara	ሞኮታ	Pro	Ser	Cve	Glv	Aen	Tle
	01,	35				001	40	n. g	T.1.1	110	Der	45	OLY	vab	110
Cys	Asn	Phe	Pro	Pro	Lys	Ile	Ala	His	Gly	His	Tyr	Lys	Gln	Ser	Ser
	50					55					60				
_	_	_					_				_				
	Tyr	Ser	Phe	Phe		Glu	Glu	Ile	Ile	_	Glu	Cys	Asp	Lys	_
65					70					75					80
Tvr	Ile	Leu	Val	Gly	Gln	Ala	T.vs	T.en	Ser	Cvs	Ser	Tur	Ser	Hic	Trn
-1-				85			2,0		90	0,0		-1-	-	95	
Ser	Ala	Pro	Ala	Pro	Gln	Cys	Lys	Ala	Leu	Cys	Arg	Lys	Pro	Glu	Leu
			100					105					110		
				_	_										_
Val	Asn		Arg	Leu	Ser	Val	_	Lys	Asp	Gln	Tyr		Glu	Pro	Glu
		115					120					125			
Asn	Val	Thr	Ile	Gln	Cvs	Asp	Ser	Glv	ጥv r	Glv	Val	Va1	ឲាម	Pro	Gln
	130				-10	135		1	-1-	U _1	140		1		
Ser	Ile	Thr	Cys	Ser	Gly	Asn	Arg	Thr	Trp	Tyr	Pro	Glu	Val	Pro	Lys
145					150					155					160
		_						_			-			_	
Cys	GLu	Trp	GLu	Thr	Pro	Glu	Gly	Cys		Gln	Val	Leu	Thr	_	Lys
				165					170					175	
Arq	Leu	Met	Gln	Cys	Leu	Pro	Asn	Pro	Glu	Asp	Val	Lvs	Met	Ala	Leu
-			180	-1-				185				-,-	190		200
Glu	Val	Tyr	Lys	Leu	Ser	Leu	Glu	Ile	Glu	Gln	Leu	Glu	Leu	Gln	Arg
		195					200			•		205			
۸	C				_		_	_	_		_				
nsp	Ser 210	Ата	Arg	Gln	ser		Leu	Asp	Lys	Glu					
	210					215					220				

<210> 1086 <211> 133 <212> PRT <213> Homo sapiens <400> 1086 Val Lys Pro Ser Gly

Val Lys Pro Ser Gly Gly Glu Gly Asp Val Ala Gln Arg Pro Arg Asp 1 5 10 15

Arg Leu Ser Ser Arg Leu Leu Gly Ser Pro Ala Trp Arg Arg Leu 20 25 30

Met Thr Glu Gly Pro Leu Ala Gly Ala Pro Val Cys Ile Phe Glu Gly 35 40 45

Pro Gly Pro Pro Gly Gly Ala Gly Ser Tyr Ser Trp Gly Leu Gly Phe 50 55 60

Arg Arg Ala Gly Gly Ala Gly Leu Lys Ala Ala Leu Val Tyr Gly 65 70 75 80

Val Val Thr Gln Ser His Trp Gln Arg Trp Gly Leu Ala Val Ala Trp 85 90 95

Gln Tyr Leu Gly Ile Ala Ser Thr Gly Asn Lys Asp Gly His Glu Gln 100 105 110

Lys Lys Lys Lys Lys 130

<210> 1087

<211> 289

<212> PRT

<213> Homo sapiens

<400> 1087

Ile Leu Thr Tyr Lys Met Lys Gln Asp Ala Ser Arg Asn Ala Ala Tyr 1 5 10 15

Thr Val Asp Cys Glu Asp Tyr Val His Val Val Glu Phe Asn Pro Phe 20 25 30

Glu Asn Gly Asp Ser Gly Asn Leu Ile Ala Tyr Gly Gly Asn Asn Tyr

		35					40					45			
Val	Val 50		Gly	Thr	Cys	Thr 55		Gln	Glu	Glu	Glu 60		Asp	Val	Glu
Gly 65		Gln	Tyr	Lys	Thr 70		Arg	Thr	Phe	His 75	His	Gly	Val	Arg	Val 80
Asp	Gly	Ile	Ala	Trp 85	Ser	Pro	Glu	Thr	Arg 90	Leu	Asp	Ser	Leu	Pro 95	Pro
Val	Ile	Lys	Phe 100		Thr	Ser	Ala	Ala 105	Asp	Met	Lys	Ile	Arg 110	Leu	Phe
Thr	Ser	Asp 115		Gln	Asp	Lys	Asn 120	Glu	Tyr	Lys	Val	Leu 125	Glu	Gly	His
Thr	Asp 130	Phe	Ile	Asn	Gly	Leu 135	Val	Phe	Asp	Pro	Lys 140	Glu	Gly	Gln	Glu
Ile 145	Ala	Ser	Val	Ser	Asp 150	Asp	His	Thr	Cys	Arg 155	Ile	Trp	Asn	Leu	Glu 160
Gly	Val	Gln	Thr	Ala 165	His	Phe	Val	Leu	His 170	Ser	Pro	Gly	Met	Ser 175	Val
Cys	Trp	His	Pro 180	Glu	Glu	Thr	Phe	Lys 185	Leu	Met	Val	Ala	Glu 190	Lys	Asn
Gly	Thr	Ile 195	Arg	Phe	Tyr	Asp	Leu 200	Leu	Ala	Gln	Gln	Ala 205	Ile	Leu	Ser
Leu	Glu 210	Ser	Glu	Gln	Val	Pro 215	Leu	Met	Ser	Ala	His 220	Trp	Cys	Leu	Lys
Asn 225	Thr	Phe	Lys	Val	Gly 230	Ala	Val	Ala	Gly	Asn 235	Asp	Trp	Leu	Ile	Trp 240
Asp	Ile	Thr	Arg	Ser 245	Ser	Tyr	Pro	Gln	Asn 250	Lys	Arg	Pro	Val	His 255	Met
Asp	Arg	Ala	Суз 260	Leu	Phe	Arg	Trp	Ser 265	Thr	Ile	Ser	Glu	Asn 270	Leu	Phe
Ala	Thr	Thr 275	Gly	Tyr	Pro	Gly	Lys 280	Met	Gln	Ala	Ser	Phe 285	Lys	Phe	Ile
Ile															

	0> 1														
	<211> 836														
<212> PRT															
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<22	2> (6771													
			qual	s an	y of	the	nati	ural	ly o	ccur	ring	L-aı	mino	aci	ds
	0 - 1	000													
	0> 10		_					34 - 1	m1	•	•	•	•	-1.	_
	Thr	Arg	Pro		Trp	Thr	GIA	Met		Asn	Leu	Leu	Asp		Pro
1				5					10					15	
Gly	Leu	Ser	Ser 20	Leu	Ser	Asp	Thr	Met 25	Ile	Met	Asp	Ser	Ile 30	Ala	Ala
Phe	Leu	Val	Leu	Pro	Asn	Arg	Leu	Leu	Val	Pro	Leu	Val	Pro	Asp	Let
		35				_	40					45			
Gln	Asp	Val	Ala	Gln	Leu	Arg	Ser	Pro	Leu	Pro	Arg	Gly	Ile	Ile	Arc
	50					55					60	-			
Ile	His	Leu	Leu	Ala	Ala	Arq	Gly	Leu	Ser	Ser	Lys	Asp	Lys	Tyr	Va:
65					70	,				75	•		_		80
															-
Lvs	Glv	Leu	Ile	Glu	Glv	Lvs	Ser	Asp	Pro	Tvr	Ala	Leu	Val	Ara	Lei
	2			85	2	-1-			90	-2-				95	
Glv	Thr	Gln	Thr	Phe	Cvs	Ser	Ara	Val	Ile	Asp	Glu	Glu	Leu	Asn	Pro
,			100		-1-		5	105					110		
			100					105							
Gln	Trn	Glv	Glu	Thr	Tur	Glu	Val	Met	Val	Hig	Glu	Val	Pro	Glv	G1 r
U 211	110	115	010	****	-1-	O.Lu	120	1100	var		Olu	125	110	013	01.
		113					120					123			
Glu	Tle	Glu	Va 1	Glu	Va l	Dhe	Agn	T.ve	Agn	Pro	Aen	Lys	Agn	Aen	Dhe
014	130	Olu	Val	OLU	Val	135	nop	D , 3	nsp	110	140	273	vab	nsp	E IIC
	130					133					140				
T 011	~1··	N	Wat	T	T 0	7.00	1701	~1	T	1703	T	C1-		C	17 1
	Gry	ALG	Met	гуз		Asp	val	GTÅ	гаг		Leu	Gln	AIG	ser	
145					150					155					160
•			m	5 1-		.	01 -	01	a 1	01	a 1	~ 1 ~	1	•••	-
ren	Asp	Asp	Trp		Pro	Leu	GIN	GIÀ	_	GIN	GIĀ	Gln	val		rec
				165					170					175	
			_			-	_		_			_	_		
Arg	Leu	Glu	-	Leu	ser	Leu	Leu		Asp	Ala	Glu	Lys		Glu	Glr
			180					185					190		
	_														
Val	Leu		Trp	Asn	Trp	Gly		Ser	Ser	Arg	Pro	Asp	Pro	Pro	Ser
		195					200					205			

Ala	Ala 210	Ile	Leu	Val	Val	Tyr 215	Leu	Asp	Arg	Ala	GIn 220	Asp	Leu	Pro	Le
Lys 225	Lys	Gly	Asn	Lys	Glu 230	Pro	Asn	Pro	Met	Val 235	Gln	Leu	Ser	Ile	G1:
Asp	Val	Thr	Gln	Glu 245	Ser	Lys	Ala	Val	Tyr 250	Ser	Thr	Asn	Cys	Pro 255	Va:
Trp	Glu	Glu	Ala 260	Phe	Arg	Phe	Phe	Leu 265	Gln	Asp	Pro	Gln	Ser 270	Gln	Glı
Leu	Asp	Val 275	Gln	Val	Lys	Asp	Asp 280	Ser	Arg	Ala	Leu	Thr 285	Leu	Gly	Ala
	290				Ala	295					300				
Asp 305	Gln	Trp	Phe	Gln	Leu 310	Ser	Ser	Ser	Gly	Pro 315	Asn	Ser	Arg	Leu	Ту: 320
				325	Arg				330					335	
			340		Gly	-		345		-	-		350		
		355		-	Ser		360	_				365		-	
	370				Gln	375	_				380				
385					Asp 390					395				_	400
				405	Ser				410					415	
			420		His			425					430		
		435			Val		440					445			
	450				Asp	455					460				
Arg 465	Cys	Lys	Val	-	Leu 470	Thr	Thr	Val	Leu	Asn 475	Ser	Gly	Phe	Leu	Asp 480

Glu	Trp	Leu	Thr	Leu 485		Asp	Val	Pro	Ser 490	_	Arg	Leu	His	Leu 495	-
Leu	Glu	Arg	Leu 500		Pro	Arg	Pro	Thr 505	Ala	Ala	Glu	Leu	Glu 510		Va]
Leu	Gln	Val 515		Ser	Leu	Ile	Gln 520	Thr	Gln	Lys	Ser	Ala 525	Glu	Leu	Ala
Ala	Ala 530	Leu	Leu ~-	Ser	Ile	Tyr 535	Met	Glu	Arg	Ala	Glu 540	Asp	Leu	Pro	Leu
545					550					555			Thr		560
				565					570				Ala	575	
			580					585					Thr 590		
		595					600					605	Gly	•	
	610					615					620		Cys		
625					630		_		_	635			Leu		640
				645					650				Ala	655	
			660					665					Pro 670		
		675					680					685	Leu		
	690					695					700		Gly		
705					710					715			Arg		720
				725					730				Gly	735	
10	PTO	Asp	Pro 740	Tyr	val	ser	ren	Leu 745	rea	Leu	Pro	Asp	Lys 750	Asn	Arg

 Gly
 Thr
 Lys
 Arg
 Arg
 Thr
 Ser
 Gln
 Lys
 Lys
 Arg
 Thr
 Leu
 Ser
 Pro
 Glu

 Phe
 Asn
 Glu
 Arg
 Phe
 Glu
 Trp
 Glu
 Leu
 Pro
 Leu
 Asp
 Glu
 Ala
 Gln
 Arg

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Arg Lys Leu Asp Val Ser Val Lys Ser Asn Ser Ser Phe Met Ser Arg 785 790 795 800

Glu Arg Glu Leu Leu Gly Lys Val Gln Leu Asp Leu Ala Glu Thr Asp 805 810 815

Leu Ser Gln Gly Val Ala Arg Trp Tyr Asp Leu Met Asp Asn Lys Asp 820 825 830

Lys Gly Ser Ser 835

<210> 1089

<211> 409

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (17)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (65)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (393)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (406)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1089

Arg Ser Ser Val Ala Ser Val His Thr Trp Arg Gln Arg Gln Val
1 5 10 15

Xaa Val Phe Val Leu Pro Ser Thr Ala Asn Met Lys Arg Pro Lys Leu 20 25 30

Lys	Lys	Ala 35		Lys	Arg	Met	Thr 40	Cys	His	Lys	Arg	Tyr 45	Lys	Ile	Gln
Lys	Lys 50	Val	Arg	Glu	His	His 55	Arg	Lys	Leu	Arg	Lys 60	Glu	Ala	Lys	Lys
Xaa 65	Gly	His	Lys	Lys	Pro 70	Arg	Lys	Asp	Pro	Gly 75	Val	Pro	Asn	Ser	Ala 80
Pro	Phe	Lys	Glu	Ala 85	Leu	Leu	Arg	Glu	Ala 90	Glu	Leu	Arg	Lys	Gln 95	Arg
Leu	Glu	Glu	Leu 100	_	Gln	Gln	Gln	Lys 105	Leu	Asp	Arg	Gln	Lys 110	Glu	Leu
Glu	Lys	Lys 115	Arg	Lys	Leu	Glu	Thr 120	Asn	Pro	Asp	Ile	Lys 125	Pro	Ser	Asn
Val	Glu 130	Pro	Met	Glu	Lys	Glu 135	Phe	Gly	Leu	Cys	Lys 140	Thr	Glu	Asn	Lys
Ala 145	Lys	Ser	Gly	Lys	Gln 150	Asn	Ser	Lys	Lys	Leu 155	Tyr	Cys	Gln	Glu	Leu 160
Lys	Lys	Val	Ile	Glu 165	Ala	Ser	Asp	Val	Val 170	Leu	Glu	Val	Leu	Asp 175	Ala
			180		Суѕ			185					190		
		195			ГÀЗ		200					205		-	
	210				Leu	215					220				
225					Phe 230					235					240
			_	245	Val	-		-	250					255	
Ser	Glu	Val	Cys 260	Phe	Gly	Lys	Glu	Gly 265	Leu	Trp	Lys	Leu	Leu 270	Gly	Gly
Phe	Gln	Glu 275	Thr	Cys	Ser	Lys	Ala 280	Ile	Arg	Val	Gly	Val 285	Ile	Gly	Phe
Pro	Asn 290	Val	Gly	Lys	Ser	Ser 295	Ile	Ile	Asn	Ser	Leu 300	Lys	Gln	Glu	Gln

Met Cys Asn Val Gly Val Ser Met Gly Leu Thr Arg Ser Met Gln Val 305 310 315 320

Val Pro Leu Asp Lys Gln Ile Thr Ile Ile Asp Ser Pro Ser Phe Ile 325 330 335

Val Ser Pro Leu Asn Ser Ser Ser Ala Leu Ala Leu Arg Ser Pro Ala 340 345 350

Ser Ile Glu Val Val Lys Pro Met Glu Ala Ala Ser Ala Ile Leu Ser 355 360 365

Gln Ala Asp Ala Arg Gln Val Val Leu Lys Tyr Thr Val Pro Gly Tyr 370 375 380

Arg Asn Ser Leu Gly Ile Phe Tyr Xaa Ala Cys Ser Glu Lys Arg Tyr 385 390 395 400

Ala Pro Lys Arg Trp Xaa Pro Lys Cys 405

<210> 1090

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<400> 1090

Pro Lys Asn Trp Xaa Thr Ala Arg Ala Asp His His Ala Ser Met Asn
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Trp Val Pro Cys Gly His Ser Tyr Phe Gly Ala Thr Leu Asn Ser Phe 20 25 30

Ile His Val Leu Met Tyr Ser Tyr Tyr Gly Leu Ser Ser Val Pro Ser 35 40 45

Met Arg Pro Tyr Leu Trp Trp Xaa Glu Val His His Ser Gly Ala Ala 50 55 60

Ala Ser Val Cys Ala Asp Asn His Pro Asp Gln Leu Arg Gly His Leu 70 Ala Val His Ile Pro Ser Trp Leu Val Val Phe Pro Asp Trp Ile His 90 Asp Phe Pro Asp Cys Ser Leu His Lys Leu Leu His Ser Asp Leu Gln 105 Gln Glu Arg Gly Leu Pro Lys Glu Arg Pro Pro Glu Gly Pro Pro Glu 120 Trp Val His Gly Cys Cys Glu Trp Thr His Gln Gln Leu Phe Thr Pro Gly Lys Gln Cys Glu Ala Lys Glu Ala Ala Glu Gly Leu Lys Ser Lys 145 150 Asn <210> 1091 <211> 118 <212> PRT <213> Homo sapiens <400> 1091 Ser Lys Asn Ser Ala Arg Glu Glu Met Ala Ala Ser Ser Ser Ser 5 Ser Ala Gly Gly Val Ser Gly Ser Ser Val Thr Gly Ser Gly Phe Ser 25 Val Ser Asp Leu Ala Pro Pro Arg Lys Ala Leu Phe Thr Tyr Pro Lys 40 Gly Ala Gly Glu Met Leu Glu Asp Gly Ser Glu Arg Phe Leu Cys Glu 50 Ser Val Phe Ser Tyr Gln Val Ala Ser Thr Leu Lys Gln Val Lys His Asp Gln Gln Val Ala Arg Met Glu Lys Leu Ala Gly Leu Val Glu Glu 85 90

Leu Glu Ala Asp Glu Trp Arg Phe Lys Pro Ile Glu Gln Leu Leu Gly

105

Phe Thr Pro Ser Ser Gly 115

<210> 1092

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<212> PRT

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<400> 1092

Ala Pro Phe Leu Ala Ala Gly Val Ser Met Gly Gly Met Leu Leu Leu 1 5 10 15

Asn Tyr Leu Gly Lys Ile Gly Ser Lys Thr Pro Leu Met Ala Ala Ala 20 25 30

Thr Phe Ser Val Gly Trp Asn Thr Phe Ala Cys Ser Glu Ser Leu Glu 35 40 45

Lys Pro Leu Asn Trp Leu Leu Phe Asn Tyr Tyr Leu Thr Thr Cys Leu 50 60

Gln Ser Ser Val Asn Lys His Arg His Met Phe Val Lys Gln Val Asp 65 70 75 80

Met Asp His Val Met Lys Ala Lys Ser Ile Arg Glu Phe Asp Lys Arg 85 90 95

Phe Thr Ser Val Met Phe Gly Tyr Gln Thr Ile Asp Asp Tyr Tyr Thr 100 105 110

Asp Ala Ser Pro Ser Pro Arg Leu Lys Ser Val Gly Ile Pro Val Leu 115 120 125

Cys Leu Asn Ser Val Asp Asp Val Phe Ser Pro Ser His Ala Ile Pro 130 135 140

Ile Glu Thr Ala Lys Gln Asn Pro Asn Val Ala Leu Val Leu Thr Ser 145 150 155 160

Tyr Gly Gly His Ile Gly Phe Leu Glu Gly Ile Trp Pro Arg Gln Ser 165 170 175

Thr Tyr Met Asp Arg Val Phe Lys Gln Phe Val Gln Ala Met Val Glu 180 185 190

His Gly His Glu Leu Ser 195

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Arg Ser Pro Asp Val Val Ile His Pro Pro Arg Pro Pro Lys Met Leu
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Gly Leu Gln Val
         35
<210> 1094
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	0> 1														
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Thr	His	Ala	Ser 20		Asp	Ala	Trp	Val 25		Arg	Gln	Leu	Ala 30	_	Pro
Asp	Asn	Thr 35		Phe	Val	Asn	Arg 40	Thr	Leu	Phe	Asp	Gln 45		Leu	Glu
Phe	Leu 50	Cys	Ser	Pro	Asp	Asp 55	Asp	Ser	Arg	His	Ser 60	Glu	Arg	Gln	Gln
Val 65	Leu	Leu	Glu	Leu	Leu 70	Gln	Ala	Gly	Gly	75	Val	Gln	Phe	Glu	Glu 80
Ser	Arg	Leu	Ile	Arg 85	Met	Ala	Glu	Lys	Ala 90	Glu	Phe	Tyr	Gln	Ile 95	Cys
Glu	Phe	Met	Туг 100	Glu	Arg	Glu	His	Gln 105	Tyr	Asp	Lys	Ile	Ile 110	Asp	Cys
Kaa	Leu	Arg 115	Asp	Pro	Leu	Arg	Glu 120	Glu	Glu	Val	Phe	Asn 125	Tyr	Ile	His
Asn	Ile 130	Leu	Xaa	Ile	Pro	Gly 135	His	Ser	Ala	Glu	Glu 140	Lys	Gln	Ser	Val
rrp l45	Gln	Lys	Ala	Met	Asp 150	His	Ile	Glu	Glu	Xaa 155	Xaa	Xaa	Leu	Lys	Pro 160
:ys	Lys	Ala	Ala	Glu 165	Leu	Val	Ala	Thr	His 170	Phe	Ser	Gly	His	Ile 175	Glu
Thr	Val	Ile	Lys 180	Lys	Leu	Gln	Asn	Gln 185	Val	Leu	Leu	Phe	Lys 190	Phe	Leu
۱rg	Ser	Leu 195	Leu	Asp	Pro	Arg	Glu 200	Gly	Ile	His	Val	Asn 205	Gln	Glu	Leu
eu	Gln 210	Ile	Ser	Pro	Cys	Ile 215	Thr	Glu	Gln	Phe	Ile 220	Glu	Leu	Leu	Cys
:1 n	Dho	Acn	Dro	mb	Gla	17a l	710	Glu	Thr	Len	Gl n	t/a l	Tou	Cl.	C

225					230					235					240
Tyr	Arg	Leu	Glu	Glu 245	Thr	Ile	Gln	Ile	Thr 250	Gln	Lys	Tyr	Gln	Leu 255	His
Glu	Val	Thr	Ala 260	Tyr	Leu	Leu	Glu	Lys 265	Lys	Gly	Asp	Ile	His 270	Gly	Ala
Phe	Leu	Ile 275	Met	Leu	Glu	Arg	Leu 280	Gln	Ser	Lys	Leu	Gln 285	Glu	Val	Thr
His	Gln 290	Gly	Glu	Asn	Thr	Lys 295	Glu	Asp	Pro	Ser	1eu 300	Lys	Asp	Val	Glu
Asp 305	Thr	Met	Val	Glu	Thr 310	Ile	Ala	Leu	Суѕ	Gln 315	Arg	Asn	Ser	His	Asn 320
Leu	Asn	Gln	Gln	Gln 325	Arg	Glu	Ala	Leu	Trp 330	Phe	Pro	Leu	Leu	Glu 335	Ala
Met	Met	Ala	Pro 340	Gln	Lys	Leu	Ser	Ser 345	Ser	Ala	Ile	Pro	His 350	Leu	His
Ser	Glu	Ala 355	Leu	Lys	Ser	Leu	Thr 360	Met	Gln	Val	Leu	Asn 365	Ser	Met	Ala
Ala	Phe 370	Ile	Ala	Leu	Pro	Ser 375	Ile	Leu	Gln	Arg	11e 380	Leu	Gln	Asp	Pro
Val 385	Tyr	Gly	Lys	Gly	Lys 390	Leu	Gly	Glu	Ile	Gln 395	Gly	Leu	Ile	Leu	Gly 400
Met	Leu	Asp	Thr	Phe 405	Asn	Tyr	Glu	Gln	Thr 410	Leu	Leu	Glu	Thr	Thr 415	Thr
Ser	Leu	Leu	Asn 420	Gln	Asp	Leu	His	Trp 425	Ser	Leu	Cys	Asn	Leu 430	Arg	Ala
Ser	Val	Thr 435	Arg	Gly	Leu	Asn	Pro 440	Lys	Gln	Asp	Tyr	Cys 445	Ser	Ile	Cys
Leu	Gln 450	Gln	Tyr	Lys	Arg	Arg 455	Gln	Glu	Met	Ala	Asp 460	Glu	Ile	Ile	Val
Phe 465	Ser	Cys	Gly	His	Leu 470	Tyr	His	Ser	Phe	Cys 475	Leu	Gln	Asn	Lys	Glu 480
Cys	Thr	Val	Glu	Phe 485	Glu	Gly	Gln	Thr	Arg 490	Trp	Thr	Cys	Tyr	Lys 495	Cys
Ser	Ser	Ser	Asn	T.vs	Val	Glv	Lvs	Leu	Ser	Glu	Asn	Ser	Ser	Glu	Ile

500 505 510 Lys Lys Gly Arg Ile Thr Pro Ser Gln Val Lys Met Ser Pro Ser Tyr 520 His Gln Ser Lys Gly Asp Pro Thr Ala Lys Lys Gly Thr Ser Glu Pro Val Leu Asp Pro Gln Gln Ile Gln Ala Phe Asp Gln Leu Cys Arg Leu 550 Tyr Arg Gly Ser Ser Arg Leu Ala Leu Leu Thr Glu Leu Ser Gln Asn 565 5**7**0 · Arg Ser Ser Glu Ser Tyr Arg Pro Phe Ser Gly Ser Gln Ser Ala Pro 585 Ala Phe Asn Ser Ile Phe Gln Asn Glu Asn Phe Gln Leu Gln Leu Ile Pro Pro Pro Val Thr Glu Asp <210> 1095 <211> 264 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (27) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1095 Trp Xaa Ser Thr Thr Ile Trp Lys Ala Gly Pro Pro Ala Gly Thr Gly Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Xaa Thr Arg Gly Phe Trp Phe Cys Ser Ser Val Trp Val Ser Ser Arg Leu Leu Lys Met Asn Arg Leu Phe Gly Lys Ala Lys Pro Lys Ala Pro Pro Pro Ser Leu Thr Asp

	50					55					60				
Cys 65	Ile	Gly	Thr	Val	Asp 70	Ser	Arg	Ala	Glu	Ser 75	Ile	Asp	Lys	Lys	Ile 80
Ser	Arg	Leu	Asp	Ala 85	Glu	Leu	Val	Lys	Tyr 90	Lys	Asp	Gln	Ile	Lys 95	Lys
Met	Arg	Glu	Gly 100	Pro	Ala	Lys	Asn	Met 105	Val	Lys	Gln	Lys	Ala 110	Leu	Arg
Val	Leu	Lys 115	Gln	Lys	Arg	Met	Tyr 120	Glu	Gln	Gln	Arg	Asp 125	Asn	Leu	Ala
Gln	Gln 130	Ser	Phe	Asn	Met	Glu 135	Gln	Ala	Asn	Tyr	Thr 140	Ile	Gln	Ser	Leu
Lys 145	Asp	Thr	Lys	Thr	Thr 150	Val	Asp	Ala	Met	Lys 155	Leu	Gly	Val	Lys	Glu 160
Met	Lys	Lys	Ala	Туг 165	Lys	Gln	Val	Lys	Ile 170	Asp	Gln	Ile	Glu	Asp 175	Leu
Gln	Asp	Gln	Leu 180	Glu	Asp	Met	Met	Glu 185	Asp	Ala	Asn	Glu	Ile 190	Gln	Glu
Ala	Leu	Ser 195	Arg	Ser	Tyr	Gly	Thr 200	Pro	Glu	Leu	Asp	Glu 205	Asp	Asp	Leu
3lu	Ala 210	Glu	Leu	Asp	Ala	Leu 215	Gly	Asp	Glu	Leu	Leu 220	Ala	Asp	Glu	Ąsp
Ser 225	Ser	Tyr	Leu	Asp	Glu 230	Ala	Ala	Ser	Ala	Pro 235	Ala	Ile	Pro	Glu	Gly 240
Val	Pro	Thr	Asp	Thr 245	Lys	Asn	Lys	Asp	Gly 250	Val	Leu	Val	Asp	Glu 255	Phe
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<210> 1096
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Arg	Arg	Arg 35	Arg	Asn	Ala	Arg	Ala 40	Ala	Glu	Glu	Asn	Arg 45	Asn	Asn	Arg
Lys	Ile 50	Gln	Ala	Ser	Glu	Ala 55	Ser	Glu	Thr	Pro	Met 60	Ala	Ala	Ser	Val
Val 65	Ala	Ser	Thr	Pro	Glu 70	Asp	Asp	Leu	Ser	Gly 75	Pro	Glu	Glu	Asp	Pro 80
Ser	Thr	Pro	Glu	G1u 85	Ala	Ser	Thr	Thr	Pro 90	Glu	Glu	Ala	Ser	Ser 95	Thr
Ala	Gln	Ala	Gln 100	Lys	Pro	Ser	Val	Pro 105	Arg	Ser	Asn	Phe	Gln 110	Gly	Thr
Lys	Lys	Ser 115	Leu	Leu	Met	Ser	11e 120	Leu	Ala	Leu	Ile	Phe 125	Ile	Met	Gly
Asn	Ser 130	Ala	Lys	Glu	Ala	Leu 135	Val	Trp	Lys	Val	Leu 140	Gly	Lys	Leu	Gly
Met 145	Gln	Pro	Gly	Arg	Gln 150	His	Ser	Ile	Phe	Gly 155	Asp	Pro	Lys	Lys	Ile 160
Val	Thr	Glu	Glu	Phe 165	Val	Arg	Arg	Gly	туг 170	Leu	Ile	Tyr	Lys	Pro 175	Val
Pro	Arg	Ser	Ser 180	Pro	Val	Glu	Tyr	Glu 185	Phe	Phe	Trp	Gly	Pro 190	Arg	Ala
His	Val	Glu 195	Ser	Ser	Lys	Leu	Lys 200	Val	Met	His	Phe	Val 205	Ala	Arg	Val
Arg	Asn 210	Arg	Cys	Ser	Lys	Asp 215	Trp	Pro	Cys	Asn	Туг 220	Asp	Trp	Asp	Ser
Asp 225	Asp	Asp	Ala	Glu	Val 230	Glu	Ala	Ile	Leu	Asn 235	Ser	Gly	Ala	Arg	Gly 240

Tyr Ser Ala Pro

<210> 1097

<211> 132

<212> PRT

<221> SITE <222> (186)

1094

<213> Homo sapiens <400> 1097 Ala Thr Met Val Arg Met Asn Val Leu Ala Asp Ala Leu Lys Ser Ile Asn Asn Ala Glu Lys Arg Gly Lys Arg Gln Val Leu Ile Arg Pro Cys 25 Ser Lys Val Ile Val Arg Phe Leu Thr Val Met Met Lys His Gly Tyr 40 Ile Gly Glu Phe Glu Ile Ile Asp Asp His Arg Ala Gly Lys Ile Val 55 Val Asn Leu Thr Gly Arg Leu Asn Lys Cys Gly Val Ile Ser Pro Arg Phe Asp Val Gln Leu Lys Asp Leu Glu Lys Trp Gln Asn Asn Leu Leu Pro Ser Arg Gln Phe Gly Phe Ile Val Leu Thr Thr Ser Ala Gly Ile 105 Met Asp His Glu Glu Ala Arg Arg Lys His Thr Gly Gly Lys Ile Leu 115 120 Gly Phe Phe Phe 130 <210> 1098 <211> 371 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (44) <223> Xaa equals any of the naturally occurring L-amino acids <220>

<223> Xaa equals any of the naturally occurring L-amino acids

Ala Arg His Thr Pro Ala Gln Arg His Asp His Pro Gln Glu Gly Asn

10

Ile	Pro	Val	Cys 20	Val	Gln	Leu	Ala	Val 25	Cys	Ala	Leu	Pro	Leu 30	Pro	Val
Val	Pro	Gly 35	Pro	Glu	His	Cys	Gly 40	Pro	Gln	Arg	Xaa	Leu 45	Gln	Pro	Leu
Val	Tyr 50	Pro	Leu	Ala	Gln	Val 55	Ile	Ile	Gly	Cys	Ile 60	Lys	Leu	Ile	Pro
Thr 65	Ala	Arg	Phe	Tyr	Pro 70	Leu	Arg	Met	His	Суs 75	Ile	Arg	Ala	Leu	Thr 80
Leu	Leu	Ser	Gly	Ser 85	Ser	Gly	Ala	Phe	Ile 90	Pro	Val	Leu	Pro	Phe 95	Ile
			100	Gln				105					110		
		115		Ile			120					125			
	130			Lys		135					140				
145				Glu	150					155		_			160
				Leu 165					170					175	_
	-		180	Ala		-	•	185					190		
		195		Asn		٠	200					205			
	210			Ser		215					220				
225				Gly	230					235				-	240
_			_	Arg 245					250					25 5	
		_	260	Asn				265	_				270		_
Arg	Lys	Asp 275	Glu	Asp	Arg	Lys	Gln 280	Phe	Lys	Asp	Leu	Phe 285	Asp	Leu	Asn

Ser Ser Glu Glu Asp Asp Thr Glu Gly Phe Ser Glu Arg Gly Ile Leu 290 295 300

Arg Pro Leu Ser Thr Arg His Gly Val Glu Asp Asp Glu Glu Asp Glu 305 310 315 320

Glu Glu Gly Glu Glu Asp Ser Ser Asn Ser Glu Gly Glu Trp Ser Trp 325 330 335

Asp Gly Asp Pro Asp Ala Glu Ala Gly Leu Ala Pro Gly Glu Leu Gln 340 345 350

Gln Leu Ala Gln Gly Pro Glu Asp Glu Leu Glu Asp Leu Gln Leu Ser 355 360 365

Glu Asp Asp 370

<210> 1099

<211> 321

<212> PRT

<213> Homo sapiens

<400> 1099

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His Thr Ala Met His Tyr Pro Thr Ala Leu Leu Phe Leu Ile Leu Ala 20 25 30

Asn Gly Ala Gln Ala Phe Arg Ile Cys Ala Phe Asn Ala Gln Arg Leu 35 40 45

Thr Leu Ala Lys Val Ala Arg Glu Gln Val Met Asp Thr Leu Val Arg 50 55 60

Ile Leu Ala Arg Cys Asp Ile Met Val Leu Gln Glu Val Val Asp Ser 65 70 75 80

Ser Gly Ser Ala Ile Pro Leu Leu Leu Arg Glu Leu Asn Arg Phe Asp 85 90 95

Gly Ser Gly Pro Tyr Ser Thr Leu Ser Ser Pro Gln Leu Gly Arg Ser 100 105 110

Thr Tyr Met Glu Thr Tyr Val Tyr Phe Tyr Arg Ser His Lys Thr Gln 115 120 125

Val Leu Ser Ser Tyr Val Tyr Asn Asp Glu Asp Asp Val Phe Ala Arg

WO 00/55350 PCT/US00/05882

1097

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Glu 145	Pro	Phe	Val	Ala	Gln 150	Phe	Ser	Leu	Pro	Ser 155	Asn	Val	Leu	Pro	Ser 160
Leu	Val	Leu	Val	Pro 165	Leu	His	Thr	Thr	Pro 170	Lys	Ala	Val	Glu	Lys 175	Glu
Leu	Asn	Ala	Leu 180	Tyr	Asp	Val	Phe	Leu 185	Glu	Val	Ser	Gln	His 190	Trp	Gln
Ser	Lys	Asp 195	Val	Ile	Leu	Leu	Gly 200	Asp	Phe	Asn	Ala	Asp 205	Cys	Ala	Ser
Leu	Thr 210	Lys	Lys	Arg	Leu	Asp 215	Lys	Leu	Glu	Leu	Arg 220	Thr	Glu	Pro	Gly
Phe 225	His	Trp	Val	Ile	Ala 230	Asp	Gly	Glu	Asp	Thr 235	Thr	Val	Arg	Ala	Ser 240
Thr	His	Cys	Thr	туг 245	Asp	Arg	Val	Val	Leu 250	His	Gly	Glu	Arg	Cys 255	Arg
Ser	Leu	Leu	His 260	Thr	Ala	Ala	Ala	Phe 265	Asp	Phe	Pro	Thr	Ser 270	Phe	Gln
Leu	Thr	Glu 275	Glu	Glu	Ala	Leu	Asn 280	Ile	Ser	Asp	His	Tyr 285	Pro	Val	Glu
Val	Glu 290	Leu	Lys	Leu	Ser	Gln 295	Ala	His	Ser	Val	Gln 300	Pro	Leu	Ser	Leu
Thr 305	Val	Leu	Leu	Leu	10 June 20 Jun	Ser	Leu	Leu	Ser	Pro 315	Gln	Leu	Cys	Pro	Ala 320
Ala															
<210	> 11	00													
	> 60			٠											
	> PR														
<213	> Hc	omo s	apie	ens											

Leu Leu Cys Val Phe Tyr Ile Ala Cys Phe Cys Lys Asn Met Leu

Gly Asp Glu Arg Leu Val Leu Glu Arg Lys Cys Ser Ser Val Gln Arg 20 25 30

<400> 1100

Met His Phe Leu Pro Leu Ile Leu Glu Lys Thr Phe Thr Val Ile Tyr 35 40 45

Met Val Phe Cys Lys Arg Thr Ile Asn Arg Thr Phe 50 55 60

<210> 1101

<211> 254

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<213> Homo sapiens

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<222> (162)

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<220>

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<222> (170)

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<400> 1101

Phe Gly Thr Ser Tyr Ile Gly Gly Leu Leu Ser Ala Phe Tyr Leu Thr

Gly Glu Glu Val Phe Arg Ile Lys Ala Ile Arg Leu Gly Glu Lys Leu 20 25 30

Leu Pro Ala Phe Asn Thr Pro Thr Gly Ile Pro Lys Gly Val Val Ser

Phe Lys Ser Gly Asn Trp Gly Trp Ala Thr Ala Gly Ser Ser Ser Ile 50 60

Leu Ala Glu Phe Gly Ser Leu His Leu Glu Phe Leu His Leu Thr Glu 65 70 75 80

Leu Ser Gly Asn Gln Val Phe Ala Glu Lys Val Arg Asn Ile Arg Lys

85

90

95

Val Leu Arg Lys Ile Glu Lys Pro Phe Gly Leu Tyr Pro Asn Phe Leu 100 105 110

Ser Pro Val Ser Gly Asn Trp Val Gln His His Val Ser Val Gly 115 120 125

Leu Gly Asp Ser Phe Tyr Glu Tyr Leu Ile Lys Ser Trp Leu Met Ser 130 135 140

Gly 145		Thr	Asp	Met	Glu 150	Ala	Lys	Asn	Met	Tyr 155		Glu	Ala	Leu	Glu 160
Ala	Xaa	Arg	Asp	Leu 165	Leu	Ala	Glu	Суз	Xaa 170	Ser	Arg	Gly	Ala	Asp 175	Leu
His	Cys	Arg	Val 180	Ala	Arg	Gly	Asp	Ser 185	Gly	Pro	Gln	Asp	Gly 190	Ala	Pro
Gly	Leu	Phe 195	Leu	Arg	Gly	His	Asp 200	Arg	Pro	Trp	Pro	Glu 205	Asp	Ala	Lys
Glu	Glu 210	Lys	Arg	Ala	His	Tyr 215	Arg	Glu	Leu	Ala	Ala 220	Gln	Ile	Thr	Lys
Thr 225		His	Glu	Ser	Tyr 230	Ala	Arg	Ser	Asp	Thr 235	Lys	Leu	Gly	Pro	Glu 240
Ala	Ser	Gly	Leu	Thr 245	Pro	Ala	Glu	Arg	Pro 250	Trp	Pro	Pro	Ser		
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	1> 23	_													
	2> PF 3> Ho		sapie	ens											
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			Trp	Tyr 5	Pro	Ala	Pro	Leu	Arg 10	Leu	Phe	His	Ser	Asp 15	Pro
Trp	Gly	His	Ala 20	Gln	Pro	Gly	Ala	Lys 25	Arg	His	Arg	Ile	Pro 30	Glu	Pro
Glu	Ala	Ala 35	Val	Leu	Phe	Arg	Gln 40	Met	Ala	Thr	Ala	Leu 45	Ala	His	Cys
His	Gln 50	His	Gly	Leu	Val	Leu 55	Arg	Asp	Leu	Lys	Leu 60	Суз	Arg	Phe	Val
Phe 65	Ala	Asp	Arg	Glu	Arg 70	Lys	Lys	Leu	Val	Leu 75	Glu	Asn	Leu	Glu	Asp 80

Ser Cys Val Leu Thr Gly Pro Asp Asp Ser Leu Trp Asp Lys His Ala

Cys Pro Ala Tyr Val Gly Pro Glu Ile Leu Ser Ser Arg Ala Ser Tyr

105

Ser Gly Lys Ala Ala Asp Val Trp Ser Leu Gly Val Ala Leu Phe Thr 115 Tyr Pro Phe Gln Asp Ser Glu Pro Val Leu Leu 130 140

Phe Gly Lys Ile Arg Arg Gly Ala Tyr Ala Leu Pro Ala Gly Leu Ser 145 150 155 160

Ala Pro Ala Arg Cys Leu Val Arg Cys Leu Leu Arg Arg Glu Pro Ala 165 170 175

Glu Arg Leu Thr Ala Thr Gly Ile Leu Leu His Pro Trp Leu Arg Gln 180 185 190

Asp Pro Met Pro Leu Ala Pro Thr Arg Ser His Leu Trp Glu Ala Ala 195 200 205

Gln Val Val Pro Asp Gly Leu Gly Leu Asp Glu Ala Arg Glu Glu Glu 210 215 220

Gly Asp Arg Glu Val Val Leu Tyr Gly 225 230

<210> 1103

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<212> PRT

<213> Homo sapiens

<400> 1103

Cys Gln Leu Arg Ser Ala Ala Gly Val Pro Ser Ser Val Ser Val Ser 1 5 10 15

Pro Arg Asp Pro Ile Ala Met Glu Leu Ser Asp Ala Asn Leu Gln Thr
20 25 30

Leu Thr Glu Tyr Leu Lys Lys Thr Leu Asp Pro Asp Pro Ala Ile Arg 35 40 45

Arg Pro Ala Glu Lys Phe Leu Glu Ser Val Glu Gly Asn Gln Asn Tyr 50 60

Pro Leu Leu Leu Eu Thr Leu Leu Glu Lys Ser Gln Asp Asn Val Ile
65 70 75 80

Lys Val Cys Ala Ser Val Thr Phe Lys Asn Tyr Ile Lys Arg Asn Trp
85 90 95

Arg Ile Val Glu Asp Glu Pro Asn Lys Ile Cys Glu Ala Asp Arg Val

			100					105					110		
Ala	Ile	Lys 115	Ala	Asn	Ile	Val	His 120	Leu	Met	Leu	Ser	Ser 125	Pro	Glu	Gln
Ile	Gln 130	Lys	Gln	Leu	Ser	Asp 135	Ala	Ile	Ser	Ile	Ile 140	Gly	Arg	Glu	Asp
Phe 145	Pro	Gln	Lys	Trp	Pro 150	Asp	Leu	Leu	Thr	Glu 155	Met	Val	Asn	Arg	Phe 160
Gln	Ser	Gly	Asp	Phe 165	His	Val	Ile	Asn	Gly 170	Val	Leu	Arg	Thr	Ala 175	His
Ser	Leu	Phe	Lys 180	Arg	Tyr	Arg	His	Glu 185	Phe	Lys	Ser	Asn	Glu 190	Leu	Trp
Thr	Glu	Ile 195	Lys	Leu	Val	Leu	Asp 200	Ala	Phe	Ala	Leu	Pro 205	Leu	Thr	Asn
Leu	Phe 210	Lys	Ala	Thr	Ile	Glu 215	Leu	Суѕ	Ser	Thr	His 220	Ala	Asn	Asp	Ala
Ser 225	Ala	Leu	Arg	Ile	Leu 230	Phe	Ser	Ser	Leu	Ile 235	Leu	Ile	Ser	Lys	Leu 240
Phe	Tyr	Ser	Leu	Asn 245	Phe	Gln	Asp	Leu	Pro 250	Glu	Phe	Phe	Glu	Asp 255	Asn
Met	Glu	Thr	Trp 260	Met	Asn	Asn	Phe	His 265	Thr	Leu	Leu	Thr	Leu 270	Asp	Asn
Lys	Leu	Leu 275	Gln	Thr	Asp	Asp	Glu 280	Glu	Glu	Ala	Gly	Leu 285	Leu	Glu	Leu
Leu	Lys 290	Ser	Gln	Ile	Cys	Asp 295	Asn	Ala	Ala	Leu	туг 300	Ala	Gln	Lys	Tyr
Asp 305	Glu	Glu	Phe	Gln	Arg 310	Tyr	Leu	Pro	Arg	Phe 315	Val	Thr	Ala	Ile	Trp 320
Glu	Phe	Thr	Ser	Tyr 325	Asn	Gly	Ser	Arg	Gly 330						

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Gly Thr Ser Pro Gly Arg Gly Gly Xaa Gly Val Gly Leu Arg Gly Leu
Ser Ser Leu Gln Ala Pro Gln Pro Ser Arg Val Pro Trp Pro Met Ala
             20
Ala Tyr Ser Tyr Arg Pro Gly Pro Gly Ala Gly Pro Gly Pro Ala Ala
Gly Ala Ala Leu Pro Asp Gln Ser Phe Leu Trp Asn Val Phe Gln Arg
     50
                         55
                                              60
Val Asp Lys Asp Arg Ser Gly Val Ile Ser Asp Thr Glu Leu Gln Gln
                     70
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Ala Leu Ser Asn Gly Thr Trp Thr Pro Phe Asn Pro Val Thr Val Arg
85 90 95

Ser Ile Ile Ser Met Phe Asp Arg Glu Asn Lys Ala Gly Val Asn Phe 100 105 110

Ser Glu Phe Thr Gly Val Trp Lys Tyr Ile Thr Asp Trp Gln Asn Val 115 120 125

Phe Arg Thr Tyr Asp Arg Asp Asn Ser Gly Met Ile Asp Lys Asn Glu 130 135 140

Leu Lys Gln Ala Leu Xaa Val Ser Ala Thr Gly Ser Leu Thr Ser Ser 145 150 155 160

Thr Thr Ser Ser Phe Glu Xaa Leu Thr Gly Xaa Gly Arg Gly Xaa Ser 165 170 175

Xaa Ser Thr Xaa 180

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<212> PRT

<213> Homo sapiens

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Thr Thr Arg Phe Pro Ser Gly Gln Pro Leu Lys Pro Arg Pro Thr Leu 1 5 10 15

Thr Ala Ala Gly Pro Arg Pro Gly Leu Leu Cys Phe Thr Ile Tyr Ile 20 25 30

Met Asn Pro Ser Met Lys Gln Lys Gln Glu Glu Ile Lys Glu Asn Ile 35 40 45

Lys Asn Ser Ser Val Pro Arg Arg Thr Leu Lys Met Ile Gln Pro Ser 50 60

Ala Ser Gly Ser Leu Val Gly Arg Glu Asn Glu Leu Ser Ala Gly Leu 65 70 75 . 80

Ser Lys Arg Lys His Arg Asn Asp His Leu Thr Ser Thr Thr Ser Ser 85 90 95

Pro Gly Val Ile Val Pro Glu Ser Ser Glu Asn Lys Asn Leu Gly Gly 100 105 110

Val Thr Gln Glu Ser Phe Asp Leu Met Ile Lys Glu Asn Pro Ser Ser

WO 00/55350 PCT/US00/05882

1104

115 120 125 Gln Tyr Trp Lys Glu Val Ala Glu Lys Arg Arg Lys Ala Leu Tyr Glu 135 Ala Leu Lys Glu Asn Glu Lys Leu His Lys Glu Ile Glu Gln Lys Asp 150 155 Asn Glu Ile Ala Arg Leu Lys Lys Glu Asn Lys Glu Leu Ala Glu Val 170 Ala Glu His Val Gln Tyr Met Ala Glu Leu Ile Glu Arg Leu Asn Gly 185 Glu Pro Leu Asp Asn Phe Glu Ser Leu Asp Asn Gln Glu Phe Asp Ser 200 Glu Glu Glu Thr Val Glu Asp Ser Leu Val Glu Asp Ser Glu Ile Gly . 215 Thr Cys Ala Glu Gly Thr Val Ser Ser Ser Thr Asp Ala Lys Pro Cys 230 235 Ile <210> 1106 <211> 88 <212> PRT <213> Homo sapiens <400> 1106 Phe His Thr Glu Phe Ile Thr Ile Trp Asp Val Arg Gln Cys Ser Asn Lys His Cys Gln His Val Asn Phe Leu Lys Ser Val Gly His Ile Ala 20 Lys Asn Leu Leu Lys His Asn Cys Ile Phe Cys Phe Arg Ala Leu Leu Met Phe Cys Arg Ser Asn Val Cys Ile Phe Leu Leu Asn Lys Leu Val Leu Ile Leu Glu Leu Ser Asp Asp Phe Val Leu Glu Arg Thr Thr Gln

Arg Arg Gln Cys Lys Ser Lys Ser 85

<210> 1107 <211> 124 <212> PRT <213> Homo sapiens <400> 1107 Leu Val Val Leu Lys Arg Arg Pro Glu Lys Ser Gln Gly His Glu His 5 10 Arg Ala Met Pro Phe Leu Asp Ile Gln Lys Arg Phe Gly Leu Asn Ile Asp Arg Trp Leu Thr Ile Gln Ser Gly Glu Gln Pro Tyr Lys Met Ala Gly Arg Cys His Ala Phe Glu Lys Glu Trp Ile Glu Cys Ala His Gly 55 60 · Ile Gly Tyr Thr Arg Ala Glu Lys Glu Cys Lys Ile Glu Tyr Asp Asp Phe Val Glu Cys Leu Leu Arg Gln Lys Thr Met Arg Arg Ala Gly Thr 85 Ile Arg Lys Gln Arg Asp Lys Leu Ile Lys Glu Gly Lys Tyr Thr Pro 105 Pro Pro His His Ile Gly Lys Gly Glu Pro Arg Pro 120 <210> 1108 <211> 299 <212> PRT

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His 1	Leu	Leu	Cys	Cys 5	Arg	Ala	Gln	Arg	Arg 10	Pro	Gln	Thr	Pro	Pro 15	Ala
Ala	Arg	Gly	Leu 20	Glu	Pro	Ala	Gln	Arg 25	Cys	Phe	Glu	Asp	Ala 30	Gly	Xaa
Pro	Pro	Leu 35	Leu	Leu	Ala	Ala	Val 40	Leu	Leu	Gly	Leu	Val 45	Leu	Leu	Va]
Val	Leu 50	Leu	Leu	Leu	Leu	Arg 55	His	Trp	Gly	Trp	Gly 60	Leu	Суз	Leu	Ile
Gly 65	Trp	Asn	Glu	Phe	Ile 70	Leu	Gln	Pro	Ile	His 75	Asn	Leu	Leu	Met	G1y
Asp	Thr	Lys	Glu	Gln 85	Arg	·Ile	Leu	Asn	His 90	Val	Leu	Gln	His	Ala 95	Glu
Pro	Gly	Asn	Ala 100	Gln	Ser	Val	Leu	Glu 105	Ala	Ile	Asp	Thr	Туг 110	Суѕ	Glu
Gln	Lys	Glu 115	Trp	Ala	Met	Asn	Val 120	Gly	Asp	Lys	Lys	Gly 125	Lys	Ile	Val
Asp	Ala 130	Val	Ile	Gln	Glu	His 135	Gln	Pro	Ser	Val	Leu 140	Leu	Glu	Leu	Gly
Ala 145	Tyr	Cys	Gly	Tyr	Ser 150	Ala	Val	Arg	Met	Ala 155	Arg	Leu	Leu	Ser	Pro 160
Gly	Ala	Arg	Leu	11e 165	Thr	Ile	Glu	Ile	Asn 170	Pro	Asp	Сув	Ala	Ala 175	Ile
			Met 180					185					190		
Val	Val	Gly 195	Ala	Ser	Gln	Asp	Ile 200	Ile	Pro	Gln	Leu	Lys 205	Lys	Lys	Tyr
	210		Thr			215					220				
225			Asp		230					235					240
Gly	Thr	Val	Leu	Leu 245	Ala	Asp	Asn	Val	11e 250	Cys	Pro	Gly	Ala	Pro 255	Asp
Phe	Leu	Ala	His 260	Val	Arg	Gly	Ser	Ser 265	Cys	Phe	Glu	Суз	Thr 270	His	Tyr

Gln Ser Phe Leu Glu Tyr Arg Glu Val Val Asp Gly Leu Glu Lys Ala 275 280 285

Ile Tyr Lys Gly Pro Gly Ser Glu Ala Gly Pro 290 295

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<212> PRT

<213> Homo sapiens

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<400> 1109

Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Arg Leu Arg Asp Leu

1 5 10 15

Leu Thr Arg Arg Leu Thr Gly Ser Asn Tyr Pro Gly Leu Ser Ile Ser 20 25 30

Leu Arg Leu Thr Gly Ser Ser Ala Gln Glu Xaa Ala Ser Gly Val Ala 35 40 45

Leu Gly Glu Ala Pro Asp His Ser Tyr Glu Ser Leu Arg Val Thr Ser 50 55 60

Ala Gln Lys His Val Leu His Val Gln Leu Asn Arg Pro Asn Lys Arg 65 70 75 80

Asn Ala Met Asn Lys Val Phe Trp Arg Glu Met Val Glu Cys Phe Asn 85 90 95

Lys Ile Ser Arg Asp Ala Asp Cys Arg Ala Val Val Ile Ser Gly Ala 100 105 110

Gly Lys Met Phe Thr Ala Gly Ile Asp Leu Met Asp Met Ala Ser Asp 115 120 125

Ile Leu Gln Pro Lys Gly Asp Asp Val Ala Arg Ile Ser Trp Tyr Leu 130 135 140

Arg Asp Ile Ile Thr Arg Tyr Gln Glu Thr Phe Asn Val Ile Glu Arg 145 150 155 160

Cys Pro Lys Pro Val Ile Ala Ala Val His Gly Gly Cys Ile Gly Gly
165 170 175

Gly	Val	Asp	Leu 180	Val	Thr	Ala	Cys	Asp 185		Arg	Tyr	Cys	Ala 190	Gln	As
Ala	Phe	Phe 195	Gln	Val	Lys	Glu	Val 200	Asp	Val	Gly	Leu	Ala 205		Asp	Va:
Gly	Thr 210	Leu	Gln	Arg	Leu	Pro 215		Val	Ile	Gly	Asn 220	Gln	Ser	Leu	Va:
Asn 225	Glu	Leu	Ala	Phe	Thr 230	Ala	Arg	Lys	Met	Met 235	Ala	Asp	Glu	Ala	Le:
Gly	Ser	Gly	Leu	Val 245	Ser	Arg	Val	Phe	Pro 250	Asp	Lys	Glu	Val	Met 255	Lei
Asp	Ala	Ala	Leu 260	Ala	Leu	Ala	Ala	Glu 265	Ile	Ser	Ser	Lys	Ser 270	Pro	۷al
Ala	Суз	Arg 275	Ala	Pro	Arg	Ser	Thr 280	Cys	Суз	Ile	Pro	Ala 285	Thr	Ile	Arg
Trp	Pro 290	Arg	Ala	Ser	Thr	Thr 295	Trp	Arg	Pro	Gly	Thr 300				
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-400)> 11	110													
			Ala	Leu 5	Val	Cys	Lys	His	Trp 10	Tyr	Arg	Cys	Leu	His 15	Gly
Asp	Glu	Asn	Ser 20	Glu	Val	Trp	Arg	Ser 25	Leu	Cys	Ala	Arg	Ser 30	Leu	Ala
Glu	Glu	Ala 35	Leu	Arg	Thr	Asp	Ile 40	Leu	Cys	Asn	Leu	Pro 45	Ser	Tyr	Lys
Ala	Lys 50	Ile	Arg	Ala	Phe	Gln 55	His	Ala	Phe	ser	Thr 60	Asn	Asp	Cys	Ser
Arg 65	Asn	Val	Tyr	Ile	Lys 70	Lys	Asn	Gly	Phe	Thr 75	Leu	His	Arg	Asn	Pro

Ile Ala Gln Ser Thr Asp Gly Ala Arg Thr Lys Ile Gly Phe Ser Glu 85 90 95

Gly Arg His Ala Trp Glu Val Trp Trp Glu Gly Pro Leu Gly Thr Val 100 105 Ala Val Ile Gly Ile Ala Thr Lys Arg Ala Pro Met Gln Cys Gln Gly 120 Tyr Val Ala Leu Leu Gly Ser Asp Asp Gln Ser Trp Gly Trp Asn Leu 135 Val Asp Asn Asn Leu Leu His Asn Gly Glu Val Asn Gly Ser Phe Pro 150 155 Gln Cys Asn Asn Ala Pro Lys Tyr Gln Ile Gly Glu Arg Ile Arg Val 170 Ile Leu Asp Met Glu Asp Lys Thr Leu Ala Phe Glu Arg Gly Tyr Glu 190 180 185 Phe Leu Gly Val Ala Phe Arg Gly Leu Pro Lys Val Cys Leu Tyr Pro 200 Ala Val Ser Ala Val Tyr Gly Asn Thr Glu Val Thr Leu Val Tyr Leu 215 220 Gly Lys Pro Leu Asp Gly <210> 1111 <211> 59 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (11) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (16)

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Pro Xaa Leu Thr Lys Gly Asn Lys Ser Trp Xaa Ser Thr Ala Val Xaa

<400> 1111

WO 00/55350

1110

15 10 1 Thr Ala Leu Glu Leu Val Asp Pro Pro Gly Cys Arg Asn Ser Ala Pro 25 20 Gln Lys Asn Leu Lys Asn Thr Val Phe Cys Ile Asp Ile Cys Thr Val 40 Cys Val Cys Val Cys Glu Ile Lys Ile Arg Phe 55 <210> 1112 <211> 425 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (88) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (228) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1112 Cys Ile Xaa Gly Phe Tyr Phe Ala Val Leu Ala Pro Gln Glu Leu Leu Ile Tyr Glu Met Ala Glu Asn Gly Lys Asn Cys Asp Gln Arg Arg Val 20 25 Ala Met Asn Lys Glu His His Asn Gly Asn Phe Thr Asp Pro Ser Ser Val Asn Glu Lys Lys Arg Arg Glu Arg Glu Glu Arg Gln Asn Ile Val Leu Trp Arg Gln Pro Leu Ile Thr Leu Gln Tyr Phe Ser Leu Glu Ile Leu Val Ile Leu Lys Glu Trp Xaa Ser Lys Leu Trp His Arg Gln Ser 90

Ile	Val	Val	Ser 100	Phe	Leu	Leu	Leu	Leu 105	Ala	Val	Leu	Ile	Ala 110	Thr	Tyr
Tyr	Val	Glu 115	Gly	Val	His	Gln	Gln 120	Tyr	Val	Gln	Arg	11e 125	Glu	Lys	Gln
Phe	Leu 130	Leu	Tyr	Ala	Tyr	Trp 135	Ile	Gly	Leu	Gly	11e 140	Leu	Ser	Ser	Val
Gly 145	Leu	Gly	Thr	Gly	Leu 150	His	Thr	Phe	Leu	Leu 155	Tyr	Leu	Gly	Pro	His 160
Ile	Ala	Ser	Val	Thr 165	Leu	Ala	Ala	Tyr	Glu 170	Суз	Asn	Ser	Val	Asn 175	Phe
Pro	Glu	Pro	Pro 180	Tyr	Pro	Asp	Gln	Ile 185	Ile	Cys	Pro	Asp	Glu 190	Glu	Gly
		195					Trp 200					205			
	210			_		215	Gly				220				
225					230		Arg			235					240
		-		245			Glu		250				;	255	
	_		260				Lys	265				_	270		
		275					Leu 280		_			285			
	290					295	Thr				300				
305					310		Leu			315					320
			<u>.</u>	325			Ile		330					335	
			340				Gly	345			-		350		
Leu	GIN	Lys 355	Pro	Phe	GIN	GIU	Tyr 360	ren	GIU	ATA	GIU	Arg 365	GIU	råa	Leu

His His Lys Ser Glu Met Gly Thr Pro Gln Gly Glu Asn Trp Leu Ser 370 375 380

Trp Met Phe Glu Lys Leu Val Val Val Met Val Cys Tyr Phe Ile Leu 385 390 395 400

Ser Ile Ile Asn Ser Met Ala Gln Ser Tyr Ala Lys Arg Ile Gln Gln 405 410 415

Arg Leu Asn Ser Glu Glu Lys Thr Lys 420 425

<210> 1113

<211> 254

<212> PRT

<213> Homo sapiens

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<400> 1113

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Pro Arg Cys Gly Arg Ser Arg Thr Ser Gly Ser Pro Gly Leu Gln Glu 20 25 30

Phe Gly Thr Ser Ser Ser Thr Pro Ala Arg Pro Ser Ser His His Ser 35 40 45

Ala Cys Phe Leu Gly Pro Glu Ile Met Pro Leu Gly Leu Leu Trp Leu 50 55 60

Gly Leu Ala Leu Leu Gly Ala Leu His Ala Gln Ala Gln Asp Ser Thr 65 70 75 80

Ser Asp Leu Ile Pro Ala Pro Pro Leu Ser Lys Val Pro Leu Gln Gln 85 90 95

Asn Phe Gln Asp Asn Gln Phe Gln Gly Lys Trp Tyr Val Val Gly Leu 100 105 110

Ala Gly Asn Ala Ile Leu Arg Glu Asp Lys Asp Pro Gln Lys Met Tyr 115 120 125

Ala Thr Ile Tyr Glu Leu Lys Glu Asp Lys Ser Tyr Asn Val Thr Ser

130 135 140 Val Leu Phe Arg Lys Lys Cys Asp Tyr Trp Ile Arg Thr Phe Val 150 155 Pro Gly Cys Gln Pro Gly Glu Phe Thr Leu Gly Asn Ile Lys Ser Tyr 165 170 Pro Gly Leu Thr Ser Tyr Leu Val Arg Val Val Ser Thr Asn Tyr Asn 185 Gln His Ala Met Val Phe Phe Lys Lys Val Ser Gln Asn Arg Glu Tyr Phe Lys Ile Thr Leu Tyr Gly Arg Thr Lys Glu Leu Thr Ser Glu Leu Lys Glu Asn Phe Ile Arg Phe Ser Lys Ser Leu Gly Leu Pro Glu Asn 235 His Ile Val Phe Pro Val Pro Ile Asp Gln Cys Ile Asp Gly 245 250 <210> 1114 <211> 248 <212> PRT <213> Homo sapiens <400> 1114 Ala Ser Glu Glu Ala Asn Pro Ala Gly Ile Arg Ala Ile Arg Thr Ala Thr Met Thr Val Gly Lys Ser Ser Lys Met Leu Gln His Ile Asp Tyr 25 Arg Met Arg Cys Ile Leu Gln Asp Gly Arg Ile Phe Ile Gly Thr Phe 35 Lys Ala Phe Asp Lys His Met Asn Leu Ile Leu Cys Asp Cys Asp Glu Phe Arg Lys Ile Lys Pro Lys Asn Ser Lys Gln Ala Glu Arg Glu Glu 70 Lys Arg Val Leu Gly Leu Val Leu Leu Arg Gly Glu Asn Leu Val Ser Met Thr Val Glu Gly Pro Pro Pro Lys Asp Thr Gly Ile Ala Arg Val 105

Pro Leu Ala Gly Ala Ala Gly Gly Pro Gly Ile Gly Arg Ala Ala Gly 120 Arg Gly Ile Pro Ala Gly Val Pro Met Pro Gln Ala Pro Ala Gly Leu 130 135 Ala Gly Pro Val Arg Gly Val Gly Pro Ser Gln Gln Val Met Thr 155 Pro Gln Gly Arg Gly Thr Val Ala Ala Ala Ala Ala Ala Thr Ala Ser Ile Ala Gly Ala Pro Thr Gln Tyr Pro Pro Gly Arg Gly Gly Pro 180 185 Pro Pro Pro Met Gly Arg Gly Ala Pro Pro Pro Gly Met Met Gly Pro 200 Pro Pro Gly Met Arg Pro Pro Met Gly Pro Pro Met Gly Ile Pro Pro 215 220 Gly Arg Gly Thr Pro Met Gly Met Pro Pro Pro Gly Met Arg Pro Pro 225 230 235 Pro Pro Gly Met Arg Gly Leu Leu 245 <210> 1115 <211> 777

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<221> SITE <222> (14)

<223> Xaa equals any of the naturally occurring L-amino acids

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	2> (2 3> Xa		qual	s any	y of	the	nati	ıral	ly o	ccur	ring	L-a	mino	acio	is
			•						-		•				
<220>															
<221> SITE <222> (32)															
	•	•	qual	s any	y of	the	nati	ıral	ly o	ccur	ring	L-a	mino	acio	is
	0> 1							·							
Leu 1	Thr	Lys	Gly	Xaa 5	Lys	Ser	Trp	Xaa	Ser 10	Thr	Ala	Val	Xaa	Thr 15	Ala
Leu	Glu	Leu	Val 20	Xaa	Pro	Pro	Gly	Cys 25	Arg	Asn	Ser	Ala	Arg 30	Ala	Xaa
Pro	Pro	Leu 35	Gly	Ser	Ser	Pro	Leu 40	Gly	Arg	Arg	Phe	Arg 45	Val	Leu	Ser
Ser	Leu 50	Arg	Arg	Ser	Pro	Met 55	Phe	Glu	Glu	Lys	Ala 60	Ser	Ser	Pro	Ser
Gly 65	Lys	Met	Gly	Gly	Glu 70	Glu	Lys	Pro	Ile	Gly 75	Ala	Gly	Glu	Glu	Lys 80
Gln	Lys	Glu	Gly	Gly 85	Lys	Lys	Lys	Asn	Lys 90	Glu	Gly	Ser	Gly	Asp 95	Gly
Gly	Arg	Ala	Glu 100	Leu	Asn	Pro	Trp	Pro 105	Glu	туг	Ile	Tyr	Thr 110	Arg	Leu
Glu	Met	Туг 115	Asn	Ile	Leu	Lys	Ala 120	Glu	His	Asp	Ser	Ile 125	Leu	Ala	Glu
Lys	Ala 130	Glu	Lys	Asp	Ser	Lys 135	Pro	Ile	Lys	Val	Thr 140	Leu	Pro	Asp	Gly
Lys 145	Gln	Val	Asp	Ala	Glu 150	Ser	Trp	Lys	Thr	Thr 155	Pro	туг	Gln	Ile	Ala 160
Cys	Gly	Ile	Ser	Gln 165	Gly	Leu	Ala	Asp	Asn 170	Thr	Val	Ile	Ala	Lys 175	V al
Asn	Asn	Val	Val 180	Trp	Asp	Leu	Asp	Arg 185	Pro	Leu	Glu	Glu	Asp 190	Cys	Thr
Leu	Glu	Leu 195	Leu	Lys	Phe	Glu	Asp 200	Glu	Glu	Ala	Gln	Ala 205	Val	Tyr	Trp
His	Ser 210			His			-	Glu	Ala		Glu 220	Arg	Val	Tyr	Gly

Gly 225	Cys	Leu	Cys	Tyr	Gly 230	Pro	Pro	Ile	Glu	Asn 235	Gly	Phe	Tyr	Tyr	Asp 240
Met	Tyr	Leu	Glu	Glu 245	Gly	Gly	Val	Ser	Ser 250	Asn	Asp	Phe	Ser	Ser 255	Leu
Glu	Ala	Leu	Cys 260	Lys	Lys	Ile	Ile	Lys 265	Glu	Lys	Gln	Ala	Phe 270	Glu	Arg
Leu	Glu	Val 275	Lys	Lys	Glu		Leu 280	Leu	Ala	Met	Phe	Lys 285	Tyr	Asn	Lys
Phe	Lys 290	Cys	Arg	Ile	Leu	Asn 295	Glu	Lys	Val	Asn	Thr 300	Pro	Thr	Thr	Thr
Val 305	Tyr	Arg	Cys	Gly	Pro 310	Leu	Ile	Asp	Leu	Cys 315	Arg	Gly	Pro	His	Val 320
Arg	His	Thr	Gly	Lys 325	Ile	Lys	Ala	Leu	Lys 330	Ile	His	Lys	Asn	Ser 335	Ser
Thr	Tyr	Trp	Glu 340	Gly	Lys	Ala	Asp	Met 345	Glu	Thr	Leu	Gln	Arg 350	Ile	Tyr
Gly	Ile	Ser 355	Phe	Pro	Asp	Pro	Lys 360	Met	Leu	Lys	Glu	Trp 365	Glu	Lys	Phe
Gln	Glu 370	Glu	Ala	Lys	Asn	Arg 375	Asp	His	Arg	Lys	Ile 380	Gly	Arg	Asp	Gln
G1u 385	Leu	Tyr	Phe	Phe	His 390	Glu	Leu	Ser	Pro	Gly 395	Ser	Суз	Phe	Phe	Leu 400
Pro	Lys	Gly	Ala	Tyr 405	Ile	Tyr	Asn	Ala	Leu 410	Ile	Glu	Phe	Ile	Arg 415	Ser
Glu	Tyr	Arg	Lys 420	Arg	Gly	Phe	Gln	Glu 425	Val	Val	Thr	Pro	Asn 430	Ile	Phe
Asn	Ser	Arg 435	Leu	Trp	Met	Thr	Ser 440	Gly	His	Trp	Gln	His 445	Tyr	Ser	Glu
Asn	Met 450	Phe	Ser	Phe	Glu	Val 455	Glu	Lys	Glu	Leu	Phe 460	Ala	Leu	Lys	Pro
Met 465	Asn	Cys	Pro	Gly	His 470	Cys	Leu	Met	Phe	Asp 475	His	Arg	Pro	Arg	Ser 480
Trp	Arg	Glu		Pro	Leu	Arg	Leu		Asp		Gly	Val		His 495	_

Asn	Glu	Leu	Ser 500	Gly	Ala	Leu	Thr	Gly 505	Leu	Thr	Arg	Val	Arg 510	Arg	Phe
Gln	Gln	Asp 515	Asp	Ala	His	Ile	Phe 520	Суз	Ala	Met	Glu	Gln 525	Ile	Glu	Asp
Glu	Ile 530	Lys	Gly	Cys	Leu	Asp 535	Phe	Leu	Arg	Thr	Val 540	Tyr	Ser	Val	Phe
Gly 545	Phe	Ser	Phe	Lys	Leu 550	Asn	Leu	Ser	Thr	Arg 555	Pro	Glu	Lys	Phe	Leu 560
Gly	Asp	Ile	Glu	Val 565	Trp	Asp	Gln	Ala	Glu 570	Lys	Gln	Leu	Glu	Asn 575	Ser
Leu	Asn	Glu	Phe 580	Gly	Glu	Lys	Trp	Glu 585	Leu	Asn	Ser	Gly	Asp 590	Gly	Ala
Phe	Tyr	Gly 595	Pro	Lys	Ile	Asp	Ile 600	Gln	Ile	Lys	Asp	Ala 605	Ile	Gly	Arg
Tyr	His 610	Gln	Суз	Ala	Thr	Ile 615	Gln	Leu	Asp	Phe	Gln 620	Leu	Pro	Ile	Arg
Phe 625	Asn	Leu	Thr	Tyr	Val 630	Ser	His	Asp	Gly	Asp 635	Asp	Lys	Lys	Arg	Pro 640
Val	Ile	Val	His	Arg 645	Ala	Ile	Leu	Gly	ser 650	Val	Glu	Arg	Met	11e 655	Ala
Ile	Leu	Thr	Glu 660	Asn	Tyr	Gly	Gly	Lys 665	Trp	Pro	Phe	Trp	Leu 670	Ser	Pro
Arg	Gln	Val 675	Met	Val	Val	Pro	Val 680	Gly	Pro	Thr	Cys	Asp 685	Glu	Tyr	Ala
Gln	Lys 690	Val	Arg	Gln	Gln	Phe 695	His	Asp	Ala	Lys	Phe 700	Met	Ala	Asp	Ile
Asp 705	Leu	Asp	Pro	Gly	Cys 710	Thr	Leu	Asn	Lys	Lys 715	Ile	Arg	Asn	Ala	Gln 720
Leu	Ala	Gln	Tyr	Asn 725	Phe	Ile	Leu	Val	Val 730	Gly	Glu	Lys	Glu	Lys 735	Ile
Ser	Gly	Thr	Val 740	Asn	Ile	Arg	Thr	Arg 745	Asp	Asn	Lys	Val	His 750	Gly	Glu
Arg	Thr	Ile	Ser	Glu	Thr		Glu 760	Arg	Leu	Gln	Gln.	Leu 765	Lys	Glu	Phe

Arg Ser Lys Gln Ala Glu Glu Glu Phe
770 775

<210> 1116 <211> 360 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (5) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (19) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (29) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (38) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1116 Thr Thr Ser Ala Xaa Arg Trp Asp Gly Thr Arg Gly Arg Thr Arg Gly Arg Thr Xaa Gly Phe Gly Asn Leu Ser Ile Thr Gln Xaa Trp Met Met Trp Ala Met Val Ser Xaa Met Glu Ile Asp Gln Pro Ala Gly Thr Gly 40 Thr Leu Ser Arg Thr Asn Pro Pro Thr Gln Lys Pro Pro Ser Pro Pro 50 . 55 60 Met Ser Gly Arg Gly Thr Leu Gly Arg Asn Thr Pro Tyr Lys Thr Leu 65 75 Glu Pro Val Lys Pro Pro Thr Val Pro Asn Asp Tyr Met Thr Ser Pro

Ala Arg Leu Gly Ser Gln His Ser Pro Gly Arg Thr Ala Ser Leu Asn

1119

100 105 110 Gln Arg Pro Arg Thr His Ser Gly Ser Ser Gly Gly Ser Gly Ser Arg 120 Glu Asn Ser Gly Ser Ser Ser Ile Gly Ile Pro Ile Ala Val Pro Thr 135 Pro Ser Pro Pro Thr Ile Gly Pro Ala Ala Pro Gly Ser Ala Pro Gly 150 155 Ser Gln Tyr Gly Thr Met Thr Arg Gln Ile Ser Arg His Asn Ser Thr 165 170 Thr Ser Ser Thr Ser Ser Gly Gly Tyr Arg Arg Thr Pro Ser Val Thr Ala Gln Phe Ser Ala Gln Pro His Val Asn Gly Gly Pro Leu Tyr Ser 195 . 200 Gln Asn Ser Ile Ser Ile Ala Pro Pro Pro Pro Pro Met Pro Gln Leu 210 215 Thr Pro Gln Ile Pro Leu Thr Gly Phe Val Ala Arg Val Gln Glu Asn 230 235 Ile Ala Asp Ser Pro Thr Pro Pro Pro Pro Pro Pro Pro Asp Asp Ile 245 250 Pro Met Phe Asp Asp Ser Pro Pro Pro Pro Pro Pro Pro Pro Val Asp Tyr Glu Asp Glu Glu Ala Ala Val Val Gln Tyr Asn Asp Pro Tyr Ala 280 Asp Gly Asp Pro Ala Trp Ala Pro Lys Asn Tyr Ile Glu Lys Val Val 290 Ala Ile Tyr Asp Tyr Thr Lys Asp Lys Asp Asp Glu Leu Ser Phe Met 310 315 Glu Gly Ala Ile Ile Tyr Val Ile Lys Lys Asn Asp Asp Gly Trp Tyr 325 330 Glu Gly Val Cys Asn Arg Val Thr Gly Leu Phe Pro Gly Asn Tyr Val 345 Glu Ser Ile Met His Tyr Thr Asp

<210> 1117 <211> 89 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (86) <223> Xaa equals any of the naturally occurring L-amino acids Pro Ala Arg Leu Gly Ile Thr Cys His Ser Pro Ala Ile Leu Ser Thr Ala Leu Trp Gly Gly Ser Ser Pro Ile Pro Asp Ala Pro Thr Thr Gln Trp Lys Val Thr Lys Pro Ala Pro Cys Pro Arg Pro Arg Arg Val Glu 40 Pro Val Cys Ser Gly Leu Gln Ala Gln Ile Leu His Cys Tyr Arg Asp 55 Arg Pro His Glu Val Leu Leu Cys Ser Asp Leu Val Lys Ala Tyr Gln Arg Cys Val Ser Ala Xaa His Lys Gly 85 <210> 1118 <211> 347 <212> PRT <213> Homo sapiens <400> 1118 Arg Gly Val Val Asp Ser Glu Asp Leu Pro Leu Asn Ile Ser Arg Glu Met Leu Gln Gln Ser Lys Ile Leu Lys Val Ile Arg Lys Asn Ile Val 25 Lys Lys Cys Leu Glu Leu Phe Ser Glu Leu Ala Glu Asp Lys Glu Asn 40 Tyr Lys Lys Phe Tyr Glu Ala Phe Ser Lys Asn Leu Lys Leu Gly Ile

His Glu Asp Ser Thr Asn Arg Arg Leu Ser Glu Leu Leu Arg Tyr

65					70					75					80
His	Thr	Ser	Gln	Ser 85	Gly	Asp	Glu	Met	Thr 90	Ser	Leu	Ser	Glu	Tyr 95	Val
Ser	Arg	Met	Lys 100	Glu	Thr	Gln	Lys	Ser 105	Ile	Tyr	Tyr	Ile	Thr 110	Gly	Glu
Ser	Lys	Glu 115	Gln	Val	Ala	Asn	Ser 120	Ala	Phe	Val	Glu	Arg 125	Val	Arg	Lys
Arg	Gly 130	Phe	Glu	Val	Val	туr 135	Met	Thr	Glu	Pro	Ile 140	Asp	Glu	Tyr	Cys
Val 145	Gln	Gln	Leu	Lys	Glu 150	Phe	Asp	Gly	Lys	Ser 155	Leu	Val	Ser	Val	Thr 160
Lys	Glu	Gly	Leu	Glu 165	Leu	Pro	Glu	Asp	Glu 170	Glu	Glu	Lys	Lys	Lys 175	Met
Glu	Glu	Ser	Lys 180	Ala	Lys	Phe	Glu	Asn 185	Leu	Суз	Lys	Leu	Met 190	Lys	Glu
Ile	Leu	Asp 195	Lys	Lys	Val	Glu	Lys 200	Val	Thr	Ile	Ser	Asn 205	Arg	Leu	Val
Ser	Ser 210	Pro	Суз	Cys	Ile	Val 215	Thr	Ser	Thr	Tyr	Gly 220	Trp	Thr	Ala	Asn
Met 225	Glu	Arg	Ile	Met	Lys 230	Ala	Gln	Ala	Leu	Arg 235	Asp	Asn	Ser	Thr	Met 240
Gly	Tyr	Met	Met	Ala 245	Lys	Lys	His	Leu	Glu 250	Ile	Asn	Pro	Asp	His 255	Pro
Ile	Val	Glu	Thr 260	Leu	Arg	Gln	Lys	Ala 265	Glu	Ala	Asp	Lys	Asn 270	Asp	Lys
Ala	Val	Lys 275	Asp	Leu	Val	Val	Leu 280		Phe	Glu	Thr	Ala 285	Leu	Leu	Ser
Ser	Gly 290	Phe	Ser	Leu	Glu	Asp 295	Pro	Gln	Thr	His	Ser 300	Asn	Arg	Ile	туг
Arg 305	Met	Ile	Lys	Leu	Gly 310	Leu	Gly	Ile	Asp	Glu 315	Asp	Glu	Val	Ala	Ala 320
Glu	Glu	Pro	Asn	Ala 325	Ala	Val	Pro	Asp	Glu 330	Ile	Pro	Pro	Leu	Glu 335	Gly
Asp	Glu	Asp	Ala	Ser	Arg	Met	Glu	Glu	Val	Asp					

1122

340 345

<210> 1119 <211> 293 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (170) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1119 Pro Gly Ser Pro Asp Val Asn Arg Ala Val Val Arg Pro Pro Pro Pro Pro Pro Pro Pro Pro Ala Pro Gln Pro Thr Met Ser Arg Arg Lys 25 20 Gln Gly Lys Pro Gln His Leu Ser Lys Arg Glu Phe Ser Pro Glu Pro Leu Glu Ala Ile Leu Thr Asp Asp Glu Pro Asp His Gly Pro Leu Gly Ala Pro Glu Gly Asp His Asp Leu Leu Thr Cys Gly Gln Cys Gln Met Asn Phe Pro Leu Gly Asp Ile Leu Ile Phe Ile Glu His Lys Arg Lys Gln Cys Asn Gly Ser Leu Cys Leu Glu Lys Ala Val Asp Lys Pro Pro 100 105 Ser Pro Ser Pro Ile Glu Met Lys Lys Ala Ser Asn Pro Val Glu Val 120 Gly Ile Gln Val Thr Pro Glu Asp Asp Asp Cys Leu Ser Thr Ser Ser 130 Arg Gly Ile Cys Pro Lys Gln Glu His Ile Ala Asp Lys Leu Leu His Trp Arg Gly Leu Ser Ser Pro Arg Ser Xaa Thr Trp Ser Ser Asn Pro 170 His Ala Trp Asp Glu Cys Arg Ile Cys Pro Ala Gly Ile Cys Lys Asp

185

Glu Pro Ser Ser Tyr Thr Cys Thr Thr Cys Lys Gln Pro Phe Thr Ser 195 200 205

Ala Trp Phe Leu Leu Gln His Ala Gln Asn Thr His Gly Leu Arg Ile 210 215 220

Tyr Leu Glu Ser Glu His Gly Ser Pro Leu Thr Pro Arg Val Gly 11e 225 230 240

Pro Ser Gly Leu Gly Ala Glu Cys Pro Ser Gln Pro Pro Leu His Gly 245 250 255

Ile His Ile Ala Asp Asn Asn Pro Phe Asn Leu Leu Arg Ile Pro Gly 260 265 270

Ser Val Ser Arg Glu Ala Ser Gly Leu Gly Arg Arg Ala Leu Ser Thr 275 280 285

His Ser Pro Pro Val 290

<210> 1120

<211> 190

<212> PRT

<213> Homo sapiens

<400> 1120

Ala Ala Ala Ala Gly Asp Pro Gly Ala Met Gly Arg Ala Arg Asp 1 5 10 15

Ala Ile Leu Asp Ala Leu Glu Asn Leu Thr Ala Glu Glu Leu Lys Lys 20 25 30

Phe Lys Leu Lys Leu Ser Val Pro Leu Arg Glu Gly Tyr Gly Arg
35 40 45

Ile Pro Arg Gly Ala Leu Leu Ser Met Asp Ala Leu Asp Leu Thr Asp 50 55 60

Lys Leu Val Ser Phe Tyr Leu Glu Thr Tyr Gly Ala Glu Leu Thr Ala 65 70 75 80

Asn Val Leu Arg Asp Met Gly Leu Gln Glu Met Ala Gly Gln Leu Gln 85 90 95

Ala Ala Thr His Gln Gly Ser Gly Ala Ala Pro Ala Gly Ile Gln Ala 100 105 110

Pro Pro Gln Ser Ala Ala Lys Pro Gly Leu His Phe Ile Asp Gln His

1124

115 120 125 Arg Ala Ala Leu Ile Ala Arg Val Thr Asn Val Glu Trp Leu Leu Asp 135 Ala Leu Tyr Gly Lys Val Leu Thr Asp Glu Gln Tyr Gln Ala Val Arg 150 155 Pro Ser Pro Pro Thr Gln Ala Arg Cys Gly Ser Ser Ser Val Ser His 170 Gln Pro Gly Thr Gly Pro Ala Arg Thr Cys Ser Ser Arg Pro 185 <210> 1121 <211> 217 <212> PRT <213> Homo sapiens <400> 1121 Gly Arg Lys Trp Phe Cys Pro Tyr Lys Thr Trp Arg Lys Ala Phe Leu Ser Pro Arg Lys Arg His Val Met Ser Gln Ser Cys Gly Ala Arg Ala Glu Val Gln Ala Thr Gly Ser Asp Gly Ala Pro Thr Lys Ala Leu Gly 40 Leu Val Arg Val Ala Ala Val Ser Ser Asp Ser Cys Val Val Pro Met Val Glu Lys Lys Thr Ser Val Arg Ser Gln Asp Pro Gly Gln Arg Arg 75 Val Leu Asp Arg Ala Ala Arg Gln Arg Arg Ile Asn Arg Gln Leu Glu Ala Leu Glu Asn Asp Asn Phe Gln Asp Asp Pro His Ala Gly Leu Pro Gln Leu Gly Lys Arg Leu Pro Gln Phe Asp Asp Asp Ala Asp Thr Gly 115 Lys Lys Lys Lys Thr Arg Gly Asp His Phe Lys Leu Arg Phe Arg 135

Lys Asn Phe Gln Ala Leu Leu Glu Glu Gln Asn Leu Ser Val Ala Glu

155

Gly Pro Asn Tyr Leu Thr Ala Cys Ala Gly Pro Pro Ser Arg Pro Gln 165 170 175

Arg Pro Phe Cys Ala Val Cys Gly Phe Pro Ser Pro Tyr Thr Cys Val 180 185 190

Ser Cys Gly Ala Arg Tyr Cys Thr Val Arg Cys Leu Gly Thr His Gln 195 200 205

Glu Thr Arg Cys Leu Lys Trp Thr Val 210 215

<210> 1122

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1122

Gly Asn Cys Gln Lys Cys Ala Phe Gly Tyr Ser Gly Leu Asp Cys Lys 1 5 10 15

Asp Lys Phe Gln Leu Ile Leu Thr Ile Val Gly Thr Ile Ala Gly Ile 20 25 30

Val Ile Leu Ser Met Ile Ile Ala Leu Ile Val Thr Ala Arg Ser Asn 35 40 45

Asn Lys Thr Lys His Ile Glu Glu Asn Leu Ile Asp Glu Asp Phe 50 55 60

Gln Asn Leu Lys Leu Arg Ser Thr Gly Phe Thr Asn Leu Gly Ala Glu 65 70 75 80

Gly Ser Val Phe Pro Lys Val Arg Ile Thr Ala Ser Arg Asp Ser Gln 85 90 95

Met Gln Asn Pro Tyr Ser Ser His Ser Ser Met Pro Arg Pro Asp Tyr 100 105 110

<210> 1123

<211> 216

<212> PRT

<213> Homo sapiens

<400)> 11	123													
Gly l	Lys	Leu	Val	Сув 5	Gly	Met	Val	Ser	Tyr 10	Leu	Asn	Asp	Leu	Pro 15	Ser
Gln	Arg	Ile	Gln 20	Pro	Gln	Gln	Val	Ala 25	Val	Trp	Pro	Thr	Met 30	Val	Asp
Ile	Asn	Ser 35	Pro	Glu	Ser	Leu	Thr 40	Glu	Ala	Tyr	Lys	Leu 45	Arg	Ala	Ala
Arg	Leu 50	Val	Glu	Ile	Ala	Ala 55	Lys	Asn	Leu	Gln	Lys 60	Glu	Val	Ile	His
Arg 65	Lys	Ser	Lys	Glu	Val 70	Ala	Trp	Asn	Leu	Thr 75	Ser	Val	Asp	Leu	Val 80
Arg	Ala	Ser	Glu	Ala 85	His	Суз	His	Tyr	Val 90	Val	Val	Lys	Leu	Phe 95	Ser
Glu	Lys	Leu	Leu 100	Lys	Ile	Gln	Asp	Lys 105	Ala	Ile	Gln	Ala	Val 110	Leu	Arg
Ser	Leu	Cys 115	Leu	Leu	Tyr	Ser	Leu 120	Tyr	Gly	Ile	Ser	Gln 125	Asn	Ala	Gly
Asp	Phe 130	Leu	Gln	Gly	Ser	Ile 135	Met	Thr	Glu	Pro	Gln 140	Ile	Thr	Gln	Val
Asn 145	Gln	Arg	Val	Lys	Glu 150	Leu	Leu	Thr	Leu	11e 155	Arg	Ser	Asp	Ala	Val 160
Ala	Leu	Val	Asp	Ala 165	Phe	Asp	Phe	Gln	Asp 170	Val	Thr	Leu	Gly	Ser 175	Val
Leu	Gly	Arg	Туг 180	Asp	Gly	Asn	Val	Туг 185	Glu	Asn	Leu	Phe	Glu 190	Trp	Ala
Lys	Asn	Ser 195	Pro	Leu	Asn	Lys	Ala 200	Glu	Val	His	Glu	Ser 205	Tyr	Lys	His
Leu	Lys 210	Ser	Leu	Gln	Ser	Lys 215	Leu								

<210> 1124

<211> 218

<212> PRT

<213> Homo sapiens

<400)> 1	124													
Pro 1	Ser	Pro	Arg	Pro 5	Pro	Asp	Pro	Glu	Ser 10	Ser	Gln	Leu	Arg	Pro 15	Gly
Gly	Asp	Gly	Ala 20	Glu	Leu	Arg	Val	Leu 25	Val	Asp	Met	Asp	Gly 30	Val	Let
Ala	Asp	Phe 35	Glu	Ala	Gly	Leu	Leu 40	Arg	Gly	Phe	Arg	Arg 45	Arg	Phe	Pro
Glu	Glu 50	Pro	His	Val	Pro	Leu 55	Glu	Gln	Arg	Arg	Gly 60	Phe	Leu	Ala	Arg
Glu 65	Gln	Tyr	Arg	Ala	Leu 70	Arg	Pro	Asp	Leu	Ala 75	Asp	Lys	Val	Ala	Ser 80
Val	Tyr	Glu	Ala	Pro 85	Gly	Phe	Phe	Leu	Asp 90	Leu	Glu	Pro	Ile	Pro 95	Gly
Ala	Leu	Asp	Ala 100	Val	Arg	Glu	Met	Asn 105	Asp	Leu	Pro	Asp	Thr 110	Gln	Va]
Phe	Ile	Cys 115	Thr	Ser	Pro	Leu	Leu 120	Lys	Tyr	His	His	Cys 125	Val	Gly	Glu
Lys	Tyr 130	Arg	Trp	Val	Glu	Gln 135	His	Leu	Gly	Pro	Gln 140	Phe	Val	Glu	Arg
Ile 145	Ile	Leu	Thr	Arg	Asp 150	Lys	Thr	Val	Val	Leu 155	Gly	Asp	Leu	Leu	11e
Asp	Asp	Lys	Asp	Thr 165	Val	Arg	Gly	Gln	Glu 170	Glu	Thr	Pro	Ser	Trp 175	Glu
His	Ile	Leu	Phe 180	Thr	Cys	Cys	His	Asn 185	Arg	His	Leu	Val	Leu 190	Pro	Pro
Thr	Arg	Arg 195	Arg	Leu	Leu	Ser	Trp 200	Ser	Asp	Asn	Trp	Arg 205	Glu	Ile	Leu
Asp	Ser 210	Lys	Arg	Gly	Ala	Ala 215	Gln	Arg	Glu						

<210> 1125

<211> 87

<212> PRT

<213> Homo sapiens

<400> 1125

1128

Met Arg Arg Arg Val Phe Phe Leu His Arg Cys Ser Ile Leu Val Phe Leu Phe Pro Cys Lys Cys Asn Gln Met Pro Phe Tyr Met Trp Thr Tyr 20 25 Leu Tyr Trp Pro Asn Ile Phe Phe Leu Leu Ser Leu Phe Phe Pro 40 Phe Phe Leu Leu Pro Leu Phe Leu Tyr Ser Phe Leu Phe Leu Phe Phe 55 Phe Phe Phe Ser Phe Phe Phe Gly Ser Cys Cys Tyr Pro Arg His Phe Thr Ser Pro Ser Leu Lys Gly <210> 1126 <211> 174 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (7) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (173) <223> Xaa equals any of the naturally occurring L-amino acids Pro Pro Leu Gly Lys Lys Xaa Glu Leu His Arg Gly Gly Gly Arg Ser Arg Leu Glu Glu Phe Gln Met Arg Ala Arg Pro Arg Pro Arg Pro Leu 20 25 Trp Ala Thr Val Leu Ala Leu Gly Ala Leu Ala Gly Val Gly Val Gly Gly Pro Asn Ile Cys Thr Thr Arg Gly Val Ser Ser Cys Gln Gln Cys

Leu Ala Val Ser Pro Met Cys Ala Trp Cys Ser Asp Glu Ala Leu Pro

Leu Gly Ser Pro Arg Cys Asp Leu Lys Glu Asn Leu Leu Lys Asp Asn 85 90 95

Cys Ala Pro Glu Ser Ile Glu Phe Pro Val Ser Glu Ala Arg Val Leu 100 . 105 110

Glu Asp Arg Pro Leu Ser Asp Lys Gly Ser Gly Asp Ser Ser Gln Val 115 120 125

Thr Gln Val Ser Pro Gln Arg Ile Ala Leu Arg Leu Arg Pro Asp Asp 130 135 140

Ser Lys Asn Phe Ser Ile Gln Val Arg Gln Val Glu Asp Tyr Pro Val 145 150 155 160

Asp Ile Tyr Tyr Leu Met Asp Leu Ser Tyr Ser Met Xaa Gly
165 170

<210> 1127

<211> 359

<212> PRT

<213> Homo sapiens

<400> 1127

Pro Gln Pro Phe Gln Gly Ser Gly Cys Val Ile Ala Ile Leu Gly Lys
1 5 10 15

Arg Cys Ser Arg Pro Trp Arg Thr Trp Arg Gly Arg Thr Pro Ser Thr 20 25 30

Arg His Ile Cys Ser Trp Cys Thr Met Val Ser Gly Thr Ser Ala Ala 35 40 45

Val Glu Glu Tyr Ser Cys Glu Phe Gly Ser Ala Lys Tyr Tyr Ala Leu 50 55 60

Cys Gly Phe Gly Gly Val Leu Ser Cys Gly Leu Thr His Thr Ala Val 65 70 75 80

Val Pro Leu Asp Leu Val Lys Cys Arg Met Gln Val Asp Pro Gln Lys 85 90 95

Tyr Lys Gly Ile Phe Asn Gly Phe Ser Val Thr Leu Lys Glu Asp Gly
100 105 110

Val Arg Gly Leu Ala Lys Gly Trp Ala Pro Thr Phe Leu Gly Tyr Ser 115 120 125

Met Gln Gly Leu Cys Lys Phe Gly Phe Tyr Glu Val Phe Lys Val Leu

	130					135					140				
Tyr 145	Ser	Asn	Met	Leu	Gly 150	Glu	Glu	Asn	Thr	Tyr 155	Leu	Trp	Arg	Thr	Ser 160
Leu	Tyr	Leu	Ala	Ala 165	Ser	Ala	Ser	Ala	Glu 170	Phe	Phe	Ala	Asp	11e 175	Ala
Leu	Ala	Pro	Met 180	Glu	Ala	Ala	Lys	Val 185	Arg	Ile	Gln	Thr	Gln 190	Pro	Gly
Tyr	Ala	Asn 195	Thr	Leu	Arg	Asp	Ala 200	Ala	Pro	Lys	Met	Tyr 205	Lys	Glu	Glu
Gly	Leu 210	Lys	Ala	Phe	Tyr	Lys 215	Gly	Val	Ala	Pro	Leu 220	Trp	Met	Arg	Gln
11e 225	Pro	Tyr	Thr	Met	Met 230	Lys	Phe	Ala	Суз	Phe 235	Glu	Arg	Thr	Val	Glu 240
Ala	Leu	Tyr	Lys	Phe 245	Val	Val	Pro	Lys	Pro 250	Arg	Ser	Glu	Ċys	Ser 255	Lys
Pro	Glu	Gln	Leu 260	Val	Val	Thr	Phe	Val 265	Ala	Gly	Tyr	Ile	Ala 270	Gly	Val
Phe	Cys	Ala 275	Ile	Val	Ser	His	Pro 280	Ala	Asp	Ser	Val	Val 285	Ser	Val	Leu
Asn	Lys 290	Glu	Lys	Gly	Ser	Ser 295	Ala	Ser	Leu	Val	Leu 300	Lys	Arg	Leu	Gly
Phe 305	Lys	Gly	Val	Trp	Lys 310	Gly	Leu	Phe	Ala	Arg 315	Ile	Ile	Met	Ile	Gly 320
Thr	Leu	Thr	Ala	Leu 325	Gln	Trp	Phe	Ile	Tyr 330	Asp	Ser	Val	Lys	Val 335	Tyr
Phe	Arg	Leu	Pro 340	Arg	Pro	Pro	Pro	Pro 345	Glu	Met	Pro	Glu	Ser 350	Leu	Lys
Lys	Lys	Leu 355	Gly	Leu	Thr	Gln									

<210> 1128

<211> 399

<212> PRT

<213> Homo sapiens

<22	1> s: 2> (:	208)	qual:	s an	y of	the	nat	ural:	ly o	ccur:	ring	L-a	mino	acio	ds
<22	1> s: 2> (:	349)	gual:	s an	v of	the	nat	ural:	lv o	ccur:	ring	L-a	mino	acio	ds
			3		,				-1 -						
	0> 1: Glu	-	Pro	Ala 5	Glu	Pro	Leu	Gln	Туг 10	Leu	Ala	Cys	Tyr	Arg 15	Phe
His	Суз	Ser	His 20	Gln	Leu	Gly	Asp	Asn 25	Met	Trp	Phe	Leu	Thr 30	Thr	Leu
Leu	Leu	Trp 35	Val	Pro	Val	Asp	Gly 40	Gln	Val	Asp	Thr	Thr 45	Lys	Ala	Val
Ile	Thr 50	Leu	Gln	Pro	Pro	Trp 55	Val	Ser	Val	Phe	Gln 60	Glu	Glu	Thr	Val
Thr 65	Leu	His	Cys	Glu	Val 70	Leu	His	Leu	Pro	Gly 75	Ser	Ser	Ser	Thr	Gln 80
Trp	Phe	Leu	Asn	Gly 85	Thr	Ala	Thr	Gln	Thr 90	Ser	Thr	Pro	Ser	Tyr 95	Arg
Ile	Thr	Ser	Ala 100	Ser	Val	Asn	Asp	Ser 105	Gly	Glu	Tyr	Arg	Cys 110	Gln	Arg
Gly	Leu	Ser 115	Gly	Arg	Ser	Asp	Pro 120	Ile	Gln	Leu	Glu	Ile 125	His	Arg	Gly
Trp	Leu 130	Leu	Leu	Gln	Val	Ser 135	Ser	Arg	Val	Phe	Thr 140	Glu	Gly	Glu	Pro
Leu 145	Ala	Leu	Arg	Суз	His 150	Ala	Trp	Lys	Asp	Lys 155	Leu	Val	Tyr	Asn	Val 160
Leu	Tyr	Tyr	Arg	Asn 165	Gly	Lys	Ala	Phe	Lys 170	Phe	Phe	His	Trp	Asn 175	Ser
Asn	Leu	Thr	Ile 180	Leu	Lys	Thr	Asn	Ile 185	Ser	His	Asn	Gly	Thr 190	Tyr	His
Cys	Ser	Gly 195	Met	Gly	Lys	His	Arg 200	Tyr	Thr	Ser	Ala	Gly 205	Ile	Ser	Xaa
Thr	Val	Lys	Glu	Leu	Phe	Pro	Ala	Pro	Val	Leu	Asn	Ala	Ser	Val	Thr

220

215

210

Ser Pro Leu Leu Glu Gly Asn Leu Val Thr Leu Ser Cys Glu Thr Lys 225 230 Leu Leu Gln Arg Pro Gly Leu Gln Leu Tyr Phe Ser Phe Tyr Met 245 250 Gly Ser Lys Thr Leu Arg Gly Arg Asn Thr Ser Ser Glu Tyr Gln Ile 265 Leu Thr Ala Arg Arg Glu Asp Ser Gly Leu Tyr Trp Cys Glu Ala Ala 280 Thr Glu Asp Gly Asn Val Leu Lys Arg Ser Pro Glu Leu Glu Leu Gln 295 Val Leu Gly Leu Gln Leu Pro Thr Pro Val Trp Phe His Val Leu Phe 305 310 315 Tyr Leu Ala Val Gly Ile Met Phe Leu Val Asn Thr Val Leu Trp Val 325 330 Thr Ile Arg Lys Glu Leu Lys Arg Lys Lys Trp Xaa Leu Glu Ile Ser Leu Asp Ser Gly His Glu Lys Lys Val Ile Ser Ser Leu Gln Glu 355 360 Asp Arg His Leu Glu Glu Glu Leu Lys Cys Gln Glu Gln Lys Glu Glu 375 Gln Leu Gln Glu Gly Val His Arg Lys Glu Pro Gln Gly Ala Thr 390 <210> 1129 <211> 147 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (7) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (8) <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1129 Glu Ile Leu Phe Ile Phe Xaa Xaa Phe Phe Lys Gly Leu Ser Asn Ser Ala Ala Ala Met Ala Pro Val Lys Lys Leu Val Val Lys Gly Gly Lys Lys Lys Lys Gln Val Leu Lys Phe Thr Leu Asp Cys Thr His Pro Val 40 Glu Asp Gly Ile Met Asp Ala Ala Asn Phe Glu Gln Phe Leu Gln Glu 55 Arg Ile Lys Val Asn Gly Lys Ala Gly Asn Leu Gly Gly Gly Val Val Thr Ile Glu Arg Ser Lys Ser Lys Ile Thr Val Thr Ser Glu Val Pro 85 90 Phe Ser Lys Arg Tyr Leu Lys Tyr Leu Thr Lys Lys Tyr Leu Lys Lys Asn Asn Leu Arg Asp Trp Leu Arg Val Val Ala Asn Ser Lys Glu Ser 120 Tyr Glu Leu Arg Tyr Phe Gln Ile Asn Gln Asp Glu Glu Glu Glu 130 135 Asp Glu Asp 145 <210> 1130 <211> 91 <212> PRT <213> Homo sapiens <400> 1130 Asn Cys Ser Pro Ala Phe Tyr Gly Ser Ser Leu Pro Cys Pro Gln Thr Gln Gln Lys Arg Arg Gly Arg Ile Arg Gly Leu Ser Arg Pro Ala Pro 20 25

Leu Pro Thr Cys His Thr Arg Cys Glu Phe Glu His Ser Pro Glu Met

Glu Thr Ser His Pro Gln Leu Asn Asn Gly Pro Phe Met Pro Thr Leu

Pro Thr Arg Arg Gly Gln Arg Cys Thr Arg Arg Pro Ser Ser Pro 65 70 75 80

Ser Ser Ala Pro Ser His Tyr Ser Trp Phe Tyr 85 90

<210> 1131

<211> 510

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (228)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (352)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1131

Thr Ser Glu Glu Ser Arg Pro Arg Leu Ser Gln Leu Ser Val Thr Asp
1 5 10 15

Val Thr Thr Ser Ser Leu Arg Leu Asn Trp Glu Ala Pro Pro Gly Ala 20 25 30

Phe Asp Ser Phe Leu Leu Arg Phe Gly Val Pro Ser Pro Ser Thr Leu 35 40 45

Glu Pro His Pro Arg Pro Leu Leu Gln Arg Glu Leu Met Val Pro Gly
50 55 60

Thr Arg His Ser Ala Val Leu Arg Asp Leu Arg Ser Gly Thr Leu Tyr
65 70 75 80

Ser Leu Thr Leu Tyr Gly Leu Arg Gly Pro His Lys Ala Asp Ser Ile 85 90 95

Gln Gly Thr Ala Arg Thr Leu Ser Pro Val Leu Glu Ser Pro Arg Asp 100 105 110

Leu Gln Phe Ser Glu Ile Arg Glu Thr Ser Ala Lys Val Asn Trp Met 115 120 125

Pro Pro Pro Ser Arg Ala Asp Ser Phe Lys Val Ser Tyr Gln Leu Ala 130 135 140.

145	Gly	Gly	Glu	Pro	G1n 150	Ser	Val	Gln	Val	155	Gly	GIn	Ala	Arg	160
Gln	Lys	Leu	Gln	Gly 165	Leu	Ile	Pro	Gly	Ala 170	Arg	Tyr	Glu	Val	Thr 175	Val
Val	Ser	Val	Arg 180	Gly	Phe	Glu	Glu	Ser 185	Glu	Pro	Leu	Thr	Gly 190	Phe	Leu
Thr	Thr	Val 195	Pro	Asp	Gly	Pro	Thr 200	Gln	Leu	Arg	Ala	Leu 205	Asn	Leu	Thr
	210					His 215	_	-			220				
Thr 225	Tyr	Asp	Xaa	Gln	Val 230	Thr	Ala	Pro	Gly	Ala 235	Pro	Pro	Leu	Gln	Ala 240
				245		Val		_	250					255	
			260			Thr		265					270		
		275				Thr	280					285			
	290			_		Val 295					300				
305			•		310	Pro				315					320
	_	_		325		Glu			330					335	
His	Gln	Leu	Leu 340	Gly	Leu	Phe	Pro	Ser 345	Thr	Ser	Tyr	Asn	Ala 350	Arg	Xaa
		355	-	_		Ser	360					365			
	370	_	-			11e 375					380				
Met 385	Gln	Asn	Gly	Ala	Gly 390	Ala	Ser	Arg	Thr	Ser 395	Thr	Ile	Phe	Leu	Asn 400
Gly	Asn	Arg	Glu	Arg	Pro	Leu	Asn		Phe	-	Asp	Met	Glu	Thr 415	Asp

Gly Gly Gly Trp Leu Val Phe Gln Arg Arg Met Asp Gly Gln Thr Asp 420 425 Phe Trp Arg Asp Trp Glu Asp Tyr Ala His Gly Phe Gly Asn Ile Ser 435 440 Gly Glu Phe Trp Leu Gly Asn Glu Ala Leu His Ser Leu Thr Gln Ala 450 455 Gly Asp Tyr Ser Met Arg Val Asp Leu Arg Ala Gly Asp Glu Ala Val 475 Phe Ala Gln Tyr Asp Ser Phe His Val Asp Ser Ala Ala Glu Tyr Tyr 490 Arg Leu His Leu Glu Gly Tyr His Gly Thr Ala Gly Thr Pro 505 <210> 1132 <211> 430 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (182) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (216) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (408) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (410) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (414) <223> Xaa equals any of the naturally occurring L-amino acids

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	2> (4														
	•	•	qual	s any	y of	the	nati	ural	ly o	ccur	ring	L-a	nino	acio	ds
<22	0>														
<22	1> S	ITE													
<22	2> (4	428)													
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Arg	Thr	Ala	Asp	Gln	Thr	Val	Thr	Ala	Ala	Leu	Thr	Lys	Arg	Ser	Tr
1				5					10					15	
Asn	Ser	Ser		Ser	Pro	Gln	Arg	_	Thr	Glu	Gln	Thr		Glu	Th
			20					25					30		
	~1	C	D	0	.1-	D	D	*** -			0	71 -	D	m	6 1.
Met	GIU	35	PIO	ser	AId	PIO	40	ura	Arg	TLD	Cys	45	PIO	пр	GI
		33					40					43			
Ara	Leu	Leu	Leu	Thr	Ala	Ser	Leu	Leu	Thr	Phe	Trp	Asn	Pro	Pro	Th
9	50					55					60				
Thr	Ala	Lys	Leu	Thr	Ile	Glu	Ser	Thr	Pro	Phe	Asn	Val	Ala	Glu	Gly
65		-			70					75					80
Lys	Glu	Val	Leu	Leu	Leu	Val	His	Asn	Leu	Pro	Gln	His	Leu	Phe	Gly
				85					90					95	
Tyr	Ser	Trp	_	Lys	Gly	Glu	Arg	Val	Asp	Gly	Asn	Arg		Ile	Ile
			100					105					110		
								_				_			
GLY	Tyr		Ile	Gly	Thr	Gln		Ala	Thr	Pro	Gly		Ala	Tyr	Se
		115					120					125			
~7	2==	C1	710	T10	m	D=0	7.00	B 3 -	Co=	T 011	Leu	T10	Cln.	200	T 1 4
эту	130	GIU	116	116	TYL	135	ASII	Ald	ser	rea	140	116	GIII	ASII	TIG
	130					133					140				
Tle	Gln	Asn	Asp	Thr	Glv	Phe	Tur	Thr	Leu	His	Val	Tle	Lvs	Ser	Ast
145					150		-1-			155			-1-		160
Leu	Val	Asn	Glu	Glu	Ala	Thr	Glv	Gln	Phe	Arg	Val	Tyr	Pro	Glu	Lei
				165			3		170			_		175	
Pro	Lys	Pro	Ser	Ile	Xaa	Ser	Asn	Asn	Ser	Lys	Pro	Val	Glu	Asp	Lys
	-		180					185		-			190	-	•
Asp	Ala	Val	Ala	Phe	Thr	Cys	Glu	Pro	Glu	Thr	Gln	Asp	Ala	Thr	Туз
		195					200					205			

Leu Trp Trp Val Asn Asn Gln Xaa Leu Pro Val Ser Pro Arg Leu Gln

1138

210 215 220 Leu Ser Asn Gly Asn Arg Thr Leu Thr Leu Phe Asn Val Thr Arg Asn 230 235 Asp Thr Ala Ser Tyr Lys Cys Glu Thr Gln Asn Pro Val Ser Ala Arg 245 250 Arg Ser Asp Ser Val Ile Leu Asn Val Leu Tyr Gly Pro Asp Ala Pro Thr Ile Ser Pro Leu Asn Thr Ser Tyr Arg Ser Gly Glu Asn Leu Asn 280 Leu Ser Cys His Ala Ala Ser Asn Pro Pro Ala Gln Tyr Ser Trp Phe 295 Val Asn Gly Thr Phe Gln Gln Ser Thr Gln Glu Leu Phe Ile Pro Asn 305 310 315 Ile Thr Val Asn Asn Ser Gly Ser Tyr Thr Cys Gln Ala His Asn Ser 325 330 Asp Thr Gly Leu Asn Arg Thr Thr Val Thr Thr Ile Thr Val Tyr Ala 345 Glu Pro Pro Lys Pro Phe Ile Thr Ser Asn Asn Ser Asn Pro Val Glu 360 Asp Glu Asp Ala Val Ala Leu Thr Cys Glu Pro Glu Ile Gln Asn Thr Thr Tyr Leu Trp Trp Val Asn Asn Gln Ser Leu Pro Val Ser Pro Arg 390 395 Leu His Leu Pro Met Thr Thr Xaa Pro Xaa Leu Tyr Ser Xaa Ala Gln 405 410 Gly Met Met Xaa Asp Pro Met Asn Val Glu Ser Xaa Thr Asn

425

<210> 1133

<211> 737

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Xaa His Ala Ser Ala Ala Xaa Pro Thr Val Thr Ala Ala Leu Thr Arg
                                     10
Ala Phe Leu Glu Leu Lys Leu Ser Thr Lys Arg Trp Thr Glu Lys Thr
             20
Ala Glu Thr Met Gly Pro Pro Ser Ala Pro Pro Cys Arg Leu His Val
                             40
Pro Trp Lys Glu Val Leu Leu Thr Ala Ser Leu Leu Thr Phe Trp Asn
                         55
                                             60
```

Pro Pro Thr Thr Ala Lys Leu Thr Ile Glu Ser Thr Pro Phe Asn Val

65					70					75					80
Ala	Glu	Gly	Lys	Glu 85	Val	Leu	Leu	Leu	Ala 90	His	Asn	Leu	Pro	Gln 95	Asn
Arg	Ile	Gly	Туг 100	Ser	Trp	туг	Lys	Gly 105	Glu	Arg	Val	Asp	Gly 110	Asn	Ser
Leu	Ile	Val 115	Gly	Tyr	Val	Ile	Gly 120	Thr	Gln	Gln	Ala	Thr 125	Pro	Gly	Pro
Ala	Tyr 130	Ser	Gly	Arg	Glu	Thr 135	Ile	Tyr	Pro	Asn	Xaa 140	Ser	Leu	Leu	Ile
145					150	-		•		155	Thr				160
Lys	Ser	Asp	Leu	Val 165	Asn	Glu	Glu	Ala	Thr 170	Gly	Gln	Phe	His	Val 175	Tyr
			180	_				185			Asn		190		
		195					200				Pro	205			
	210	-			-	215		Ī			Leu 220				
225					230					235	Thr				240
				245					250		Ile			255	
			260					265			Val		270	_	
		275					280				Tyr	285			
	290				-	295					90 300				
305					310		•			315	Thr				320
				325					330		Tyr			335	
His	Asn	Ser	Asp	Thr	Glv	Leu	Asn	Ara	Thr	Thr	Val	Thr	Thr	Ile	Thr

			340					343					350		
Val	Tyr	Ala 355	Glu	Pro	Pro	Lys	Pro 360	Phe	Ile	Thr	Ser	Asn 365	Asn	Ser	Ası
Pro	Val 370	Glu	Asp	Glu	Asp	Ala 375	Val	Ala	Leu	Thr	Cys 380	Glu	Pro	Glu	Ile
Gln 385	Asn	Thr	Thr	Tyr	Leu 390	Trp	Trp	Val	Asn	Asn 395	Gln	Ser	Leu	Pro	Val 400
Ser	Pro	Arg	Leu	Gln 405	Leu	Ser	Asn	Asp	Asn 410	Arg	Thr	Leu	Thr	Leu 415	Let
Ser	Val	Thr	Arg 420	Asn	Asp	Val	Gly	Pro 425	Tyr	Glu	Cys	Gly	Ile 430	Gln	Asn
Glu	Leu	Ser 435	Val	Asp	His	Ser	Asp 440	Pro	Val	Ile	Leu	Asn 445	Val	Leu	Туг
Gly	Pro 450	Asp	Asp	Pro	Thr	Ile 455	Ser	Pro	Ser	Tyr	Thr 460	Tyr	Tyr	Arg	Pro
Gly 465	Val	Asn	Leu	Ser	Leu 470	Ser	Суѕ	His	Ala	Ala 475	Ser	Asn	Pro	Pro	Ala 480
Gln	Tyr	Ser	Trp	Leu 485	Ile	Asp	Gly	Asn	Ile 490	Gln	Gln	His	Thr	Gln 495	Glu
Leu	Phe	Ile	Ser 500	Asn	Ile	Thr	Glu	Lys 505	Asn	Ser	Gly	Leu	Tyr 510	Thr	Cys
Gln	Ala	Asn 515	Asn	Ser	Ala	Ser	Gly 520	His	Ser	Arg	Thr	Thr 525	Val	Lys	Thr
Ile	Thr 530	Val	Ser	Ala	Xaa	Xaa 535	Pro	Lys	Pro	Ser	Ile 540	Ser	Ser	Asn	Asn
Ser 545	Lys	Pro	Val	Glu	Asp 550	Lys	Asp	Ala	Val	Ala 555	Phe	Thr	Суз	Glu	Pro 560
Glu	Ala	Gln	Asn	Thr 565	Thr	Tyr	Leu	Trp	Trp 570	Val	Asn	Gly	Gln	Ser 575	Leu
Pro	Val	Ser	Pro 580	Arg	Leu	Gln	Leu	ser 585	Asn	Gly	Asn	Arg	Thr 590	Leu	Thr
Leu	Phe	Asn 595	Val	Thr	Arg	Asn	Asp 600	Ala	Arg	Ala	Tyr	Val 605	Cys	Gly	Ile
Gln	Asn	Ser	Val	Ser	Ala	Asn	Arg	Ser	Asp	Pro	Val	Thr	Leu	Asp	Val

1142

615 610 620 Leu Tyr Gly Pro Asp Thr Pro Ile Ile Ser Pro Pro Asp Ser Ser Tyr 630 635 Leu Ser Gly Ala Asn Leu Asn Leu Ser Cys His Ser Ala Ser Asn Pro 645 650 Ser Pro Gln Tyr Ser Trp Arg Ile Asn Gly Ile Pro Gln Gln His Thr 665 Gln Val Leu Phe Ile Ala Lys Ile Thr Pro Asn Asn Asn Gly Thr Tyr 680 Ala Cys Phe Val Ser Asn Leu Ala Thr Gly Arg Asn Asn Ser Ile Val Lys Ser Ile Thr Val Ser Ala Ser Gly Thr Ser Pro Gly Leu Ser Ala 705 710 715 Gly Ala Thr Val Gly Ile Met Ile Gly Val Leu Val Gly Val Ala Leu 725 730 Ile <210> 1134 <211> 71 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (4) <223> Xaa equals any of the naturally occurring L-amino acids Phe Gly Thr Xaa Arg Ser Val Val Leu Leu Leu Val Ala Val Arg Leu His Thr Leu Leu Ser Cys Pro Leu Glu Gln Pro Ala Gly Thr Glu Trp 25 Ile Leu Glu Glu Gly Val Thr Thr Gly Pro Pro Arg Lys Pro Arg Ala 40 Asp Ile Tyr Asn Leu Arg Ser Pro Asp Glu Phe Ile Val Gly Gln Asn

Gln Ala Leu Ile Glu Pro Gly 65 70

<210> 1135

<211> 244

<212> PRT

<213> Homo sapiens

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1 5 10 15

Asp Val Ala Thr Gly Gln Glu Val Ala Ile Lys Gln Met Asn Leu Gln 20 25 30

Gln Gln Pro Lys Lys Glu Leu Ile Ile Asn Glu Ile Leu Val Met Arg 35 40 45

Glu Asn Lys Asn Pro Asn Ile Val Asn Tyr Leu Asp Ser Tyr Leu Val 50 60

Gly Asp Glu Leu Trp Val Val Met Glu Tyr Leu Ala Gly Gly Ser Leu 65 70 75 80

Thr Asp Val Val Thr Glu Thr Cys Met Asp Glu Gly Gln Ile Ala Ala 85 90 95

Val Cys Arg Glu Xaa Leu Gln Ala Leu Glu Phe Leu His Ser Asn Gln
100 105 110

Ile Thr Pro Glu Gln Ser Lys Arg Ser Thr Met Val Gly Thr Pro Tyr 115 120 125

Trp Met Ala Pro Glu Val Val Thr Arg Lys Ala Tyr Gly Pro Lys Val 130 135 140

Asp Ile Trp Ser Leu Gly Ile Met Ala Ile Glu Met Ile Glu Gly Glu 145 150 155 160

Pro Pro Tyr Leu Asn Glu Asn Pro Leu Arg Ala Leu Tyr Leu Ile Ala 165 170 175

Thr Asn Gly Thr Pro Glu Leu Gln Asn Pro Glu Lys Leu Ser Ala Ile 180 185 190

Phe Arg Asp Phe Leu Asn Arg Cys Leu Glu Met Asp Val Glu Lys Arg 200 Gly Ser Ala Lys Glu Leu Leu Gln His Gln Phe Leu Lys Ile Ala Lys 215 Pro Leu Ser Ser Leu Thr Pro Leu Ile Ala Ala Lys Glu Ala Thr 230 235 Lys Asn Asn His <210> 1136 <211> 166 <212> PRT <213> Homo sapiens <400> 1136 Arg Ala Glu Phe Gly Thr Ser Pro Arg Ala Arg Arg His Glu Cys Cys Arg Phe Leu Asp Asp Asn Gln Ile Ile Thr Ser Ser Gly Asp Thr Thr 20 Cys Ala Leu Trp Asp Ile Glu Thr Gly Gln Gln Thr Val Gly Phe Ala 40 Gly His Ser Gly Asp Val Met Ser Leu Ser Leu Ala Pro Asp Gly Arg 55 Thr Phe Val Ser Gly Ala Cys Asp Ala Ser Ile Lys Leu Trp Asp Val Arg Asp Ser Met Cys Arg Gln Thr Phe Ile Gly His Glu Ser Asp Ile Asn Ala Val Ala Phe Phe Pro Asn Gly Tyr Ala Phe Thr Thr Gly Ser 100 105 Asp Asp Ala Thr Cys Arg Leu Phe Asp Leu Arg Ala Asp Gln Glu Leu 120 Leu Met Tyr Ser His Asp Asn Ile Ile Cys Gly Ile Thr Ser Val Ala 135 Phe Ser Arg Ser Asp Gly Cys Cys Ser Leu Ala Thr Thr Thr Ser Thr 150

Ala Thr Ser Gly Met Pro 165

<210> 1137

<211> 79

<212> PRT

<213> Homo sapiens

<400> 1137

Thr Asn Asn Lys Ser Leu Val Gln Leu Lys His Ile Ser Asn Asp Phe 1 5 10 15

Ser Lys Phe Lys Val Asp His Asp Arg Ile Ile Lys Asp Arg Lys Asp 20 25 30

Leu Ser Asn Leu Val Met Thr Ile Ile Ser Ile Phe Ala Glu Leu Lys 35 40 45

Ile Phe Asn Phe Ile Asn Met Leu Leu Gln Leu Pro Asp Leu Lys Lys 50 55 60

Lys Ser Phe Pro His Ser Gln Leu Lys Val Arg Thr Leu His Phe 65 70 75

<210> 1138

<211> 397

<212> PRT

<213> Homo sapiens

<400> 1138

Pro Thr Arg Pro Ser Ser Val Ser Arg Arg Asp Lys Ser Lys Gln Val 1 5 10 15

Trp Glu Ala Val Leu Leu Pro Leu Ser Leu Leu Ser Met Met Asp Leu 20 25 30

Arg Asn Thr Pro Ala Lys Ser Leu Asp Lys Phe Ile Glu Asp Tyr Leu $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45 \hspace{1.5cm}$

Leu Pro Asp Thr Cys Phe Arg Met Gln Ile Asn His Ala Ile Asp Ile 50 55 60

Ile Cys Gly Phe Leu Lys Glu Arg Cys Phe Arg Gly Ser Ser Tyr Pro 65 70 75 80

Val Cys Val Ser Lys Val Val Lys Gly Gly Ser Ser Gly Lys Gly Thr 85 90 95

Thr	Leu	Arg	Gly 100	Arg	Ser	Asp	Ala	Asp 105	Leu	Val	Val	Phe	Leu 110	Ser	Pro
Leu	Thr	Thr 115	Phe	Gln	Asp	Gln	Leu 120	Asn	Arg	Arg	Gly	Glu 125	Phe	Ile	Gln
Glu	Ile 130	Arg	Arg	Gln	Leu	Glu 135	Ala	Суѕ	Gln	Arg	Glu 140	Arg	Ala	Phe	Ser
Val 145	Lys	Phe	Glu	Val	Gln 150	Ala	Pro	Arg	Trp	Gly 155	Asn	Pro	Arg	Ala	Leu 160
Ser	Phe	Val	Leu	Ser 165	Ser	Leu	Gln	Leu	Gly 170	Glu	Gly	Val	Glu	Phe 175	Asp
Val	Leu	Pro	Ala 180	Phe	Asp	Ala	Leu	Asp 185	Phe	Ala	Arg	Thr	Gly 190	Gln	Leu
Thr	Gly	Gly 195	Tyr	ГÀЗ	Pro	Asn	Pro 200	Gln	Ile	Tyr	Val	Lys 205	Leu	Ile	Glu
Glu	Cys 210	Thr	Asp	Leu	Gln	Lys 215	Glu	Gly	Glu	Phe	Ser 220	Thr	Cys	Phe	Thr
Glu 225	Leu	Gln	Arg	Asp	Phe 230	Leu	Lys	Gln	Arg	Pro 235	Thr	Lys	Leu	Lys	Ser 240
Leu	Ile	Arg	Leu	Val 245	Lys	His	Trp	Tyr	Gln 250	Asn	Cys	Lys	Lys	Lys 255	Leu
Gly	Lys	Leu	Pro 260	Pro	Gln	Tyr	Ala	Leu 265	Glu	Leu	Leu	Thr	Val 270	Tyr	Ala
Trp	Glu	Arg 275	Gly	Ser	Met	Lys	Thr 280	His	Phe	Asn	Thr	Ala 285	Gln	Gly	Phe
Arg	Thr 290	Val	Leu	Glu	Leu	Val 295	Ile	Asn	Tyr	Gln	Gln 300	Leu	Cys	Ile	Tyr
Trp 305	Thr	Lys	Tyr	Tyr	Asp 310	Phe	Lys	Asn	Pro	Ile 315	Ile	Glu	Lys	Tyr	Leu 320
Arg	Arg	Gln	Leu	Thr 325	Lys	Pro	Arg	Pro	Val 330	Ile	Leu	Asp	Pro	Ala 335	Asp
Pro	Thr	Gly	Asn 340	Leu	Gly	Gly	Gly	Asp 345	Pro	Lys	Gly	Trp	Arg 350	Gln	Leu
Ala	Gln	Glu 355	Ala	Glu	Ala	Trp	Leu 360	Asn	Tyr	Pro	Cys	Phe 365	Lys	Asn	Trp

1147

Asp Gly Ser Pro Val Ser Ser Trp Ile Leu Leu Val Arg Pro Pro Ala 370 380

Ser Ser Leu Pro Phe Ile Pro Ala Pro Leu His Glu Ala 385 390 395

<210> 1139

<211> 180

<212> PRT

<213> Homo sapiens

<400> 1139

Phe Leu Leu Ser Asn Ala Arg Trp Ser Asn Arg Pro Asp Thr Ala Thr

1 5 10 15

Ala Leu Ala Gly Gly Ala Val Met Pro Glu Leu Ile Leu Ser Pro Ala 20 25 30

Thr Ala Pro His Pro Leu Lys Met Phe Ala Cys Ser Lys Phe Val Ser 35 40 45

Thr Pro Ser Leu Val Lys Ser Thr Ser Gln Leu Leu Ser Arg Pro Leu 50 55 60

Ser Ala Val Val Leu Lys Arg Pro Glu Ile Leu Thr Asp Glu Ser Leu 65 70 75 80

Ser Ser Leu Ala Val Ser Cys Pro Leu Thr Ser Leu Val Ser Ser Arg 85 90 95

Ser Phe Gln Thr Ser Ala Ile Ser Arg Asp Ile Asp Thr Ala Ala Lys 100 105 110

Phe Ile Gly Ala Gly Ala Ala Thr Val Gly Val Ala Gly Ser Gly Ala 115 120 125

Gly Ile Gly Thr Val Phe Gly Ser Leu Ile Ile Gly Tyr Ala Arg Asn 130 135 140

Leu Ser Glu Ala Met Gly Leu Phe Cys Leu Met Val Ala Phe Leu Ile 165 170 175

Leu Phe Ala Met

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vəħ	210		, vra	. Leu	cys	215		ALG	чэр	Pne	220		TYE	rea	PIC
Leu 225		Ser	Gln	Asp	Pro 230	Ala	Pro	Val	Arg	Glu 235	_	His	Asp	Pro	Ser 240
qeA	Arg	Leu	Val	Pro 245	Glu	Leu	Asp	Thr	Ile 250		Pro	Leu	Glu	Ser 255	
Lys	Ala	Tyr	Asn 260		Val	Asp	Ile	11e 265	His	Ser	Val	Val	Asp 270	Glu	Arg
Glu	Phe	Phe 275		Ile	Met	Pro	Asn 280	Tyr	Ala	Lys	Asn	Ile 285	Ile	Val	Gly
Phe	Ala 290		Met	Asn	Gly	Arg 295	Thr	Val	Gly	Ile	Val 300	Gly	Asn	Gln	Pro
Lys 305	Val	Ala	Ser	Gly	Cys 310	Leu	Asp	Ile	Asn	Ser 315	Ser	Val	Lys	Gly	Ala 320
				325	Суз				330					335	
			340		Phe			345					350		
		355			Ala		360					365			
	370				Val	375					380				
385					Lys 390					395					400
				405	Ala				410					415	
			420		Glu			425					430		
		435			Pro		440					445			
	450				Ser	455					460				
165	Val	Leu	Ala		Lys 470	Lys	Val	Gln		Pro 475	Trp	Arg	Lys	His	Ala 480

Asn Ile Pro Leu

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Lys Pro Gln Ala Glu Lys Val Asp Val Ile Ala Gly Ser Ser Lys Met
             20
                                 25
Lys Gly Phe Ser Ser Ser Glu Ser Glu Ser Ser Ser Glu Ser Ser
                             40
                                                45
Ser Asp Ser Glu Xaa Xaa Glu Thr Gly Pro Ala
                         55
```

30

25

20

Thr Asn Lys Phe Pro Ser Glu Tyr Val Pro Thr Val Phe Asp Asn Tyr 40 Ala Val Thr Val Met Ile Gly Gly Glu Pro Tyr Thr Leu Gly Leu Phe Asp Thr Ala Gly Gln Glu Asp Tyr Asp Arg Leu Arg Pro Leu Ser Tyr Pro Gln Thr Asp Val Phe Leu Val Cys Phe Ser Val Val Ser Pro Ser 90 Ser Phe Glu Asn Val Lys Glu Lys Trp Val Pro Glu Ile Thr His His 105 Cys Pro Lys Thr Pro Phe Leu Leu Val Gly Thr Gln Ile Asp Leu Arg 120 Asp Asp Pro Ser Thr Ile Glu Lys Leu Ala Lys Asn Lys Gln Lys Pro 135 Ile Thr Pro Glu Thr Ala Glu Lys Leu Ala Arg Asp Leu Lys Ala Val Lys Tyr Val Glu Cys Ser Ala Leu Thr Gln Lys Gly Leu Lys Asn Val Phe Asp Glu Ala Ile Leu Ala Ala Leu Glu Pro Pro Glu Pro Lys Lys 185 190 Ser Arg Arg Cys Val Leu Leu 195 <210> 1143 <211> 171 <212> PRT <213> Homo sapiens <400> 1143 Gly Asp Leu Asp Cys Pro Asp Trp Val Leu Ala Glu Ile Ser Thr Leu 5 Ala Lys Met Tyr Glu Lys Ile Leu Lys Leu Thr Ala Asp Ala Lys Phe 25 Glu Ser Gly Asp Val Lys Ala Thr Val Ala Val Leu Ser Phe Ile Leu

Ser Ser Ala Ala Lys His Ser Val Asp Gly Glu Ser Leu Ser Ser Glu Leu Gln Gln Leu Gly Leu Pro Lys Glu His Ala Ala Ser Leu Cys Arg 70 75 Cys Tyr Glu Glu Lys Gln Ser Pro Leu Gln Lys His Leu Arg Val Cys 90 Ser Leu Arg Met Asn Arg Leu Ala Gly Val Gly Trp Arg Val Asp Tyr 105 Thr Leu Ser Ser Ser Leu Leu Gln Ser Val Glu Glu Pro Met Val His 115 120 Leu Arg Leu Glu Val Ala Ala Ala Pro Gly Thr Pro Ala Gln Pro Val 135 Ala Met Ser Leu Ser Ala Asp Lys Phe Gln Val Leu Leu Ala Glu Leu Lys Gln Ala Gln Thr Leu Met Ser Ser Leu Gly <210> 1144 <211> 151 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (22) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (38) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <223> Xaa equals any of the naturally occurring L-amino acids

Gln Trp Arg Gln Gly Val Gln Gly Arg Ser Ala Ser Gly Thr Ser Thr

10

Cys Arg Val Ala Arg Xaa Gly Gln Asp Trp Pro Ala Ala Ser Pro Gly
20 25 30

Val Asn Leu Arg Asn Xaa Phe Xaa Pro Pro Leu Leu Ala Pro Val 35 40 45

Pro Thr Pro Val Ala Pro Ser Leu Gly Ser Pro Leu Leu Leu Ser His 50 55 60

Pro Glu Arg Gln Ser Gly Pro Val Thr Gly Gly Ala Gly Glu Gly His
65 70 75 80

Arg Cys Ala Ser Pro Gln Thr Val Cys Gln Val Ser Glu Leu Val Thr 85 90 95

Arg Pro Ala Ala Gln Pro Ser Ala Ala Ala Gln Pro Ala Ala Pro Ala 100 105 110

Gly Gly Arg Thr Pro Gly Arg Ala Gly Pro His Leu Pro Ile Tyr Lys 115 120 125

Ile Gly Gln Gly Asn Met Lys Ala Asp Leu Gln Ala Ala Ala Thr Ala 130 135 140

Lys Pro Gly Lys Ser Gln Gln 145 150

<210> 1145

<211> 70

<212> PRT

<213> Homo sapiens

<400> 1145

Ala Asp Ile Ala Gly Val Leu Ala Ile Arg Pro Asp Glu Leu Arg Phe 1 5 10 15

Arg Tyr Ser Met Val Ala Tyr Trp Arg Gln Ala Gly Leu Ser Tyr Ile $20 \hspace{1cm} 25 \hspace{1cm} 30$

Arg Tyr Ser Gln Ile Cys Ala Lys Ala Val Arg Asp Ala Leu Lys Thr 35 40 45

Glu Phe Lys Ala Asn Ala Glu Lys Thr Ser Gly Ser Asn Val Lys Ile 50 60

Val Lys Val Lys Lys Glu

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<213	3> H	omo :	sapie	ens											
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	2> (
<223	3> X	aa e	qual	s any	, of	the	nati	ural	Ly o	ccur	ring	L-ai	nino	acio	is
<400	0> 1	146													
Leu 1	His	Ala	Asn	Gln 5	Val	Ile	His	Arg	Asp 10	Ile	Lys	Ser	Asp	Asn 15	Val
Leu	Leu	Gly	Met 20	Glu	Gly	Ser	Val	Lys 25	Leu	Thr	Asp	Phe	Gly 30	Phe	Cys
Ala	Gln	Ile 35	Thr	Pro	Glu	Gln	Ser 40	Lys	Arg	Ser	Thr	Met 45	Val	Gly	Thr
Pro	Tyr 50	Trp	Met	Ala	Pro	Glu 55	Xaa	Val	Thr	Arg	Lys 60	Ala	Tyr	Gly	Pro
Lys 65	Val	Asp	Ile	Trp	Ser 70	Leu	Gly	Ile	Met	Ala 75	Ile	Glu	Met	Val	Glu 80
Gly	Glu	Pro	Pro	Tyr 85	Leu	Asn	Glu	Asn	Pro 90	Leu	Arg	Ala	Leu	Tyr 95	Leu
Ile	Ala	Thr	Asn 100	Gly	Thr	Pro	Glu	Leu 105	Gln	Asn	Pro	Glu	Lys 110	Leu	Ser
Pro	Ile	Phe 115	Arg	Asp	Phe	Leu	Asn 120	Arg	Cys	Leu	Glu	Met 125	Asp	Val	Glu
Lys	Arg 130	Gly	Ser	Ala	Lys	Glu 135	Leu	Leu	Gln	His	Pro 140	Phe	Leu	Lys	Leu
Ala 145	Lys	Pro	Leu	Ser	Ser 150	Leu	Thr	Pro	Leu	11e 155	Met	Ala	Ala	Lys	Glu 160
Ala	Met	Lys	Ser	Asn 165	Arg										

<210> 1147

<211> 420

<212> PRT

<213> Homo sapiens

<220															
	1> S														
	2> (:	•			_						_				
<22:	3> Xa	aa e	qual:	s any	y of	the	nati	ıral.	Ly o	ccur	ring	L-a	mıno	acı	15
		-													
	0> 1:			_				_	_	_			_		_
-	Pro	Pro	Phe		Val	Arg	Val	Pro			Ala	Gly	Leu		Leu
1				5					10					15	
Leu	Pro	Ser	Pro	Ser	Leu	Met	Ala		Leu	Arg	Arg	Pro		Val	Ser
			20					25					30		
_					_					_		_		_	
Ser	Asp		Glu	Asn	Ile	Asp		Gly	Val	Asn	Ser	_	Val	Lys	Ser
		35					40					45			
		•		_	_			_						_	
His		Thr	Ile	Arg	Arg		Val	Leu	Glu	Glu		Gly	Asn	Arg	Val
	50					55					60				
				_				_	_			_		_	
	Thr	Arg	Ala	Ala	Gln	Val	Ala	Lys	Lys		Gln	Asn	Thr	Lys	
65					70					75					80
	_				_			_			_		_	_	_
Pro	Val	Gln	Pro		Lys	Thr	Thr	Asn		Asn	Lys	Gln	Leu	_	Pro
				85					90					95	
			_			_	_							_	
Thr	Ala	Ser		Lys	Pro	Val	Gln		Glu	Lys	Leu	Ala		Lys	Gly
			100					105					110		
_	_		_			_									
Pro	Ser		Thr	Pro	Glu	Asp		Ser	Met	Lys	Glu		Asn	Leu	Cys
		115					120					125			
			_			_	_	_						_	_
Gln		Phe	Ser	Asp	Ala		Leu	Cys	Lys	Ile		Asp	Ile	Asp	Asn
	130					135					140				
				_	_		_	_		_	_		_		
	Asp	Trp	GIu	Asn	Pro	GIN	Leu	cys	ser	_	Tyr	vaı	гÀг	Asp	
145					150					155					160
				_		_			_		_		_	_	•
Tyr	Gln	Tyr	Leu	-	Gln	Leu	Glu	Val		GIn	Ser	IIe	Asn		His
				165					170					175	
	_	_		_	_		_				_			_	
Phe	Leu	Asp	_	Arg	Asp	Ile	Asn	_	Arg	Met	Arg	Ala		Leu	Val
			180					185					190		
Asp	Trp		Val	Gln	Val	His		Lys	Phe	Xaa	Leu		Gln	Glu	Thr
		195					200					205			
_											_				
Leu	-	Met	Cys	Val	Gly		Met	Asp	Arg	Phe		Gln	Val	Gln	Pro
	210					215					220				
	_	_	_	_	_		_						_	_	_
	Ser	Arg	Lys	rys	Leu	Gln	Leu	Val	Gly		Thr	Ala	Leu	Leu	
225					230					235					240

Ala Ser Lys Tyr Glu Glu Met Phe Ser Pro Asn Ile Glu Asp Phe Val 245 250 Tyr Ile Thr Asp Asn Ala Tyr Thr Ser Ser Gln Ile Arg Glu Met Glu 265 Thr Leu Ile Leu Lys Glu Leu Lys Phe Glu Leu Gly Arg Pro Leu Pro 280 Leu His Phe Leu Arg Arg Ala Ser Lys Ala Gly Glu Val Asp Val Glu 295 Gln His Thr Leu Ala Lys Tyr Leu Met Glu Leu Thr Leu Ile Asp Tyr 310 Asp Met Val His Tyr His Pro Ser Lys Val Ala Ala Ala Ser Cys 330 Leu Ser Gln Lys Val Leu Gly Gln Gly Lys Trp Asn Leu Lys Gln Gln Tyr Tyr Thr Gly Tyr Thr Glu Asn Glu Val Leu Glu Val Met Gln His 360 Met Ala Lys Asn Val Val Lys Val Asn Glu Asn Leu Thr Lys Phe Ile 375 Ala Ile Lys Asn Lys Tyr Ala Ser Ser Lys Leu Leu Lys Ile Ser Met 385 390 Ile Pro Gln Leu Asn Ser Lys Ala Val Lys Asp Leu Ala Ser Pro Leu

Ile Gly Arg Ser 420

<210> 1148

<211> 249

<212> PRT

<213> Homo sapiens

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<221> SITE

<222> (244)

<223> Xaa equals any of the naturally occurring L-amino acids

410

<400> 1148

Gln Ser Asn Ala Val Trp Leu Leu Gly His Leu His Leu Ser Thr Leu

1157

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Ser	Ser	Ser	Gln 20	Ser	Arg	Ala	Ser	Val 25	Pro	Thr	Asp	туг	Ser 30	Tyr	Leu
Pro	Glu	Ser 35	Ser	Phe	Ile	Gly	Ala 40	Ala	Ile	Gly	Phe	Phe 45	Ile	Thr	Gly
Gly	Lys 50	Lys	Gly	Pro	Glu	Ser 55	Val	Pro	Pro	Ser	Leu 60	Leu	Lys	Val	Val
Met 65	Lys	Pro	Ile	Ala	Thr 70	Val	Gly	Glu	Ser	Tyr 75	Gln	Tyr	Pro	Pro	Val 80
Asn	Trp	Ala	Ala	Leu 85	Leu	Ser	Pro	Leu	Met 90	Arg	Leu	Asn	Phe	Gly 95	Glu
Glu	Ile	Gln	Gln 100	Leu	Cys	Leu	Glu	Ile 105	Met	Val	Thr	Gln	Ala 110	Gln	Ser
Ser	Gln	Asn 115	Ala	Ala	Ala	Leu	Leu 120	Gly	Leu	Trp	Val	Thr 125	Pro	Pro	Leu
Ile	His 130	Ser	Leu	Ser	Leu	Asn 135	Thr	Lys	Arg	Tyr	Leu 140	Leu	Ile	Ser	Ala
Pro 145	Leu	Trp	Ile	Lys	His 150	Ile	Ser	Asp	Glu	Gln 155	Ile	Leu	Gly	Phe	Val 160
Glu	Asn	Leu	Met	Val 165	Ala	Val	Phe	Lys	Ala 170	Ala	Ser	Pro	Leu	Gly 175	Ser
Pro	Glu	Leu	Cys 180	Pro	Ser	Ala	Leu	His 185	Gly	Leu	Ser	Gln	Ala 190	Met	Lys
Leu	Pro	Ser 195	Pro	Ala	His	His	Leu 200	Trp	Ser	Leu	Leu	Ser 205	Glu	Ala	Thr
Gly	Lys 210	Ile	Phe	Asp	Leu	Leu 215	Pro	Asn	Lys	Ile	Arg 220	Arg	Lys	Asp	Leu
Glu 225	Leu	Tyr	Ile	Ser	Ile 230	Ala	Lys	Cys	Leu	Leu 235	Glu	Met	Thr	Asp	Asp 240
Asp	Ala	Asn	Xaa	Asp 245	Arg	Pro	Gly	Tyr							

<210> 1149 <211> 239

<212>	PRT	
<213>	Homo	sapiens

<400> 1149

Arg Asp Pro Pro Arg Pro Val Gln Ser Gly Leu Gly Ala Ala Gly Thr
1 5 10 15

Leu Ser Trp Leu Pro Pro Pro Glu Gln Pro Val Leu Val Pro Arg Leu 20 25 30

Pro Ala Pro Arg Pro Val Met Thr Leu Arg Pro Ser Leu Leu Pro Leu 35 40 45

His Leu Leu Leu Leu Leu Leu Ser Ala Ala Val Cys Arg Ala Glu
50 55 60

Ala Gly Leu Glu Thr Glu Ser Pro Val Arg Thr Leu Gln Val Glu Thr 65 70 75 80

Leu Val Glu Pro Pro Glu Pro Cys Ala Glu Pro Ala Ala Phe Gly Asp
85 90 95

Thr Leu His Ile His Tyr Thr Gly Ser Leu Val Asp Gly Arg Ile Ile 100 105 110

Asp Thr Ser Leu Thr Arg Asp Pro Leu Val Ile Glu Leu Gly Gln Lys 115 120 125

Gln Val Ile Pro Gly Leu Glu Gln Ser Leu Leu Asp Met Cys Val Gly 130 135 140

Glu Lys Arg Arg Ala Ile Ile Pro Ser His Leu Ala Tyr Gly Lys Arg 145 150 155 160

Gly Phe Pro Pro Ser Val Pro Ala Asp Ala Val Val Gln Tyr Asp Val
165 170 175

Glu Leu Ile Ala Leu Ile Arg Ala Asn Tyr Trp Leu Lys Leu Val Lys 180 185 190

Gly Ile Leu Pro Leu Val Gly Met Ala Met Val Pro Ala Leu Leu Gly 195 200 205

Leu Ile Gly Tyr His Leu Tyr Arg Lys Ala Asn Arg Pro Lys Val Ser 210 215 220

Lys Lys Lys Leu Lys Glu Glu Lys Arg Asn Lys Ser Lys Lys Lys 225 235

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<222> (3)	
<223> Xaa equals any of the naturally o	occurring b-amino acids
<pre><400> 1150 Ala Glu Xaa Gly Lys Thr Glu Trp Leu Phe</pre>	Gly Met Asn Gly Gly Ara
1 5 10	
Lys Gln Leu Ala Ala Ser Ala Gly Phe Arg	Arg Leu Ile Thr Val Ala
20 25	30
Leu His Arg Gly Gln Gln Tyr Glu Ser Met	: Asp His Ile Gln Ala Glu 45
	-
Leu Ser Ala Arg Val Met Glu Leu Ala Pro 50 55	Ala Gly Met Pro Thr Gln 60
Gln Gln Val Pro Phe Leu Ser Val Gly Gly	Asp The Gly Val Arg Thr
65 70	75 80
Val Gln His Gln Asp Cys Ser Pro Leu Ser 85 90	
	,,,
Asp Val Gln Gly Asp Asp Lys Arg Tyr Phe 100 105	Arg Arg Leu Ile Phe Leu 110
Ser Asn Arg Asn Val Val Gln Ser Glu Ala 115 120	125
Ser His Lys Ala Gln Lys Lys Arg Lys Lys	Asp Arg Lys Lys Gln Arg
130 135	140
Pro Ala Asp Ala Glu Asp Leu Pro Ala Ala	Pro Gly Gln Ser Ile Asp
145 150	155 160
Lys Ser Tyr Leu Cys Cys Glu His His Lys	•
165 170	175
Ala Leu Leu Arg Asn Pro Glu Leu Leu	
180 185	190
Leu Val Val Gly Leu Gly Gly Gly Ser Leu	
195 200	·205
His Phe Pro Lys Ser Cys Ile Asp Ala Val	Glu Ile Asp Pro Ser Met

1160

220

215

Leu Glu Val Ala Thr Gln Trp Phe Gly Phe Ser Gln Ser Asp Arg Met Lys Val His Ile Ala Asp Gly Leu Asp Tyr Ile Ala Ser Leu Ala Gly 250 Gly Glu Ala Arg Pro Cys Tyr Asp Val Ile Met Phe Asp Val Asp Ser Lys Asp Pro Thr Leu Gly Met Ser Cys Pro Pro Pro Ala Phe Val Glu Gln Ser Phe Leu Gln Lys Val Lys Ser Ile Leu Thr Pro Glu Gly 295 Val Phe Ile Leu Asn Leu Val Cys Arg Asp Leu Gly Leu Lys Asp Ser 310 Val Leu Ala Gly Leu Lys Ala Val Phe Pro Leu Leu Tyr Val Arg Arg 325 330 Ile Glu Gly Glu Val Asn Glu Ile Leu Phe Cys Gln Leu His Pro Glu 345 Gln Lys Leu Ala Thr Pro Glu Leu Leu Glu Thr Ala Gln Ala Leu Glu 355 Arg Thr Leu Arg Lys Pro Gly Arg Gly Trp Asp Asp Thr Tyr Val Leu 375 380 Ser Asp Met Leu Lys Thr Val Lys Ile Val 390 <210> 1151 <211> 111 <212> PRT <213> Homo sapiens <400> 1151 Val Asn Val Asn Pro Ser Leu Cys His Ser Ser His Leu Val Asp Leu Gly Ser Gly Ser Val Glu Phe Cys Ala Trp Glu Trp Ser Trp Arg Glu Trp Gly Leu Cys Thr Ala Ala Thr Ser Pro Arg Ser Ser His Leu

150

Pro Ala Pro Arg Pro Gly Cys Met Ala Ala Pro Val Cys Val Gln Arg 55 Ser Val Ser His Pro Leu His Leu Leu Ser Gly Gly Leu Gly Ser Pro 70 Thr Cys Cys Gln Asp Leu Gly Ala Ile Lys Tyr Ser Gly Phe Val Lys 85 105 <210> 1152 <211> 172 <212> PRT <213> Homo sapiens <400> 1152 Leu Gly Asp Thr Ile Glu Gly Arg Leu Gln Val Pro Val Arg Asn Ser Arg Val Asp Pro Arg Val Arg Ala Arg Gly Ala Asp Arg Met Gly Lys Cys Arg Gly Leu Arg Thr Ala Arg Lys Leu Arg Ser His Arg Arg Asp Gln Lys Trp His Asp Lys Gln Tyr Lys Lys Ala His Leu Gly Thr Ala 50 55 Leu Lys Ala Asn Pro Phe Gly Gly Ala Ser His Ala Lys Gly Ile Val Leu Glu Lys Val Gly Val Glu Ala Lys Gln Pro Asn Ser Ala Ile Arq 90 Lys Cys Val Arg Val Gln Leu Ile Lys Asn Gly Lys Lys Ile Thr Ala 100 Phe Val Pro Asn Asp Gly Cys Leu Asn Phe Ile Glu Glu Asn Asp Glu Val Leu Val Ala Gly Phe Gly Arg Lys Gly His Ala Val Gly Asp Ile 130 135 Pro Gly Val Arg Phe Lys Val Val Lys Val Ala Asn Val Ser Leu Leu

Ala Leu Tyr Lys Gly Lys Lys Glu Arg Pro Arg Ser 165 170

<210> 1153

<211> 197

<212> PRT

<213> Homo sapiens

<400> 1153

Tyr Trp Cys Glu Gln Cys Asp Val Gln Phe Ser Ser Ser Glu Leu

1 5 10 15

Tyr Leu His Phe Gln Glu His Ser Cys Asp Glu Gln Tyr Leu Cys Gln 20 25 30

Phe Cys Glu His Glu Thr Asn Asp Pro Glu Asp Leu His Ser His Val 35 40 45

Val Asn Glu His Ala Cys Lys Leu Ile Glu Leu Ser Asp Lys Tyr Asn 50 60

Asn Gly Glu His Gly Gln Tyr Ser Leu Leu Ser Lys Ile Thr Phe Asp 65 70 75 80

Lys Cys Lys Asn Phe Phe Val Cys Gln Val Cys Gly Phe Arg Ser Arg 85 90 95

Leu His Thr Asn Val Asn Arg His Val Ala Ile Glu His Thr Lys Ile 100 105 110

Phe Pro His Val Cys Asp Asp Cys Gly Lys Gly Phe Ser Ser Met Leu 115 120 125

Glu Tyr Cys Lys His Leu Asn Ser His Leu Ser Glu Gly Ile Tyr Leu 130 135 140

Cys Gln Tyr Cys Glu Tyr Ser Thr Gly Gln Ile Glu Asp Leu Lys Ile 145 150 155 160

His Leu Asp Phe Lys His Ser Ala Asp Leu Pro His Lys Cys Ser Asp 165 170 175

Cys Leu Met Arg Phe Gly Asn Glu Arg Glu Leu Ile Ser His Leu Pro 180 185 190

Val His Glu Thr Thr 195

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<210> 1154 '
<211> 156
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<213> Homo sapiens
<400> 1154
5
                      10
25
Ser Ser Ser Ser Asp Ser Glu Gly Ser Ser Leu Pro Val Gln Pro Glu
                 40
Val Ala Leu Lys Arg Val Pro Ser Pro Thr Pro Ala Pro Lys Glu Ala
Val Arg Glu Gly Arg Pro Pro Glu Pro Thr Pro Ala Lys Arg Lys Arg
            70
                 75
85
                      90
105
115
                 120
                            125
Pro Gly Pro Gln Ala Cys Pro Asn Leu Gln Ala Pro Arg Ser His Pro
              135
Leu Ala Ser Gly Gly Pro Ala Ala Pro Gly Ser Gln
           150
<210> 1155
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<213> Homo sapiens
<220>
<221> SITE
<222> (73)
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<223> Xaa equals any of the naturally occurring L-amino acids

<220> <221> SITE

<222> (105) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (122) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1155 Pro Glu Ala Pro Arg Gly Val Val Thr Cys Leu Arg Ala Leu Leu Ser His Gln His Gln Thr Arg Pro His Arg Val Pro Gly Thr Met Phe Gly Lys Arg Lys Lys Arg Val Glu Ile Ser Ala Pro Ser Asn Phe Glu His 35 40 Arg Val His Thr Gly Phe Asp Gln His Glu Gln Lys Phe Thr Gly Leu 55 Pro Arg Gln Trp Gln Ser Leu Ile Xaa Glu Ser Ala Arg Arg Pro Lys 70 75 Pro Leu Val Asp Pro Ala Cys Ile Thr Ser Ile Gln Pro Gly Ala Pro 85 Lys Thr Ile Val Arg Gly Ser Lys Xaa Ala Lys Asp Gly Ala Leu Thr Leu Leu Leu Asp Glu Phe Glu Asn Met Xaa Val Thr Arg 115 120 <210> 1156 <211> 202 <212> PRT <213> Homo sapiens

<400> 1156

Arg Pro Thr Arg Pro Gln Pro Ser Pro Asp Glu Ala Arg Pro Leu Gln

Ala Leu Leu Asp Gly Arg Gly Leu Cys Val Asn Ala Ser Ala Val Ser 25

Arg Leu Arg Ala Tyr Leu Leu Pro Ala Pro Pro Ala Pro Gly Asn Ala

Ser Glu Ser Glu Glu Asp Arg Ser Ala Gly Ser Val Glu Ser Pro Ser

1165

50 55 60 Val Ser Ser Thr His Arg Val Ser Asp Pro Lys Phe His Pro Leu His 70 75 Ser Lys Ile Ile Ile Lys Lys Gly His Ala Lys Asp Ser Gln Arg 90 Tyr Lys Val Asp Tyr Glu Ser Gln Ser Thr Asp Thr Gln Asn Phe Ser 105 Ser Glu Ser Lys Arg Glu Thr Glu Tyr Gly Pro Cys Arg Arg Glu Met 120 Glu Asp Thr Leu Asn His Leu Lys Phe Leu Asn Val Leu Ser Pro Arg Gly Val His Ile Pro Asn Cys Asp Lys Lys Gly Phe Tyr Lys Lys 150 155 Gln Cys Arg Pro Ser Lys Gly Arg Lys Arg Gly Phe Cys Trp Cys Val 165 170 Asp Lys Tyr Gly Gln Pro Leu Pro Gly Tyr Thr Thr Lys Gly Lys Glu 185 Asp Val His Cys Tyr Ser Met Gln Ser Lys <210> 1157 <211> 269 <212> PRT <213> Homo sapiens <400> 1157 Arg Arg Cys Cys His Ser Ala Thr Met Phe Glu Ala Arg Leu Val Gln Gly Ser Ile Leu Lys Lys Val Leu Glu Ala Leu Lys Asp Leu Ile Asn Glu Ala Cys Trp Asp Ile Ser Ser Ser Gly Val Asn Leu Gln Ser Met 40 Asp Ser Ser His Val Ser Leu Val Gln Leu Thr Leu Arg Ser Glu Gly Phe Asp Thr Tyr Arg Cys Asp Arg Asn Leu Ala Met Gly Val Asn Leu

PCT/US00/05882

Thr Ser Met Ser Lys Ile Leu Lys Cys Ala Gly Asn Glu Asp Ile Ile 85 90 95

Thr Leu Arg Ala Glu Asp Asn Ala Asp Thr Leu Ala Leu Val Phe Glu 100 105 110

Ala Pro Asn Gln Glu Lys Val Ser Asp Tyr Glu Met Lys Leu Met Asp 115 120 125

Leu Asp Val Glu Gln Leu Gly Ile Pro Glu Gln Glu Tyr Ser Cys Val 130 135 140

Val Lys Met Pro Ser Gly Glu Phe Ala Arg Ile Cys Arg Asp Leu Ser 145 150 155 160

His Ile Gly Asp Ala Val Val Ile Ser Cys Ala Lys Asp Gly Val Lys 165 170 175

Phe Ser Ala Ser Gly Glu Leu Gly Asn Gly Asn Ile Lys Leu Ser Gln 180 185 190

Thr Ser Asn Val Asp Lys Glu Glu Glu Ala Val Thr Ile Glu Met Asn 195 200 205

Glu Pro Val Gln Leu Thr Phe Ala Leu Arg Tyr Leu Asn Phe Phe Thr 210 215 220

Lys Ala Thr Pro Leu Ser Ser Thr Val Thr Leu Ser Met Ser Ala Asp 225 230 235 240

Val Pro Leu Val Val Glu Tyr Lys Ile Ala Asp Met Gly His Leu Lys 245 250 255

Tyr Tyr Leu Ala Pro Lys Ile Glu Asp Glu Glu Gly Ser 260 265

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<211> 639

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (129)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222	2> (150)													
<223	3> Xa	aa e	qual	s any	y of	the	nati	ıral	ly o	ccur	ring	L-ar	nino	acio	is
<400)> 1:	158													
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Leu	Lys	Glu	Ala 20	Phe	Ala	Lys	Val	Asp 25	Leu	Asn	Ser	Asn	Gly 30	Phe	Ile
Суз	Asp	Туг 35	Glu	Leu	His	Glu	Leu 40	Phe	Lys	Glu	Ala	Asn 45	Met	Pro	Leu
Pro	Gly 50	Tyr	Lys	Val	Arg	G1u 55	Ile	Ile	Gln	Lys	Leu 60	Met	Leu	Asp	Gly
Asp 65	Arg	Asn	Lys	Asp	Gly 70	Lys	Ile	Ser	Phe	Asp 75	Glu	Phe	Val	Tyr	Ile 80
Phe	Gln	Glu	Val	Lys 85	Ser	Ser	Asp	Ile	.Ala 90	Lys	Thr	Phe	Arg	Lys 95	Ala
Ile	Asn	Arg	Lys 100	Glu	Gly	Ile	Суз	Ala 105	Leu	Gly	Gly	Thr	Ser 110	Glu	Leu
Ser	Ser	Glu 115	Gly	Thr	Gln	His	Ser 120	Tyr	Ser	Glu	Glu	Glu 125	Lys	Tyr	Ala
Xaa	Val 130	Asn	Trp	Ile	Asn	Lys 135	Ala	Leu	Glu	Asn	Asp 140	Pro	Asp	Cys	Arg
His 145	Val	Ile	Pro	Met	Xaa 150	Pro	Asn	Thr	Asp	Asp 155	Leu	Phe	Lys	Ala	Val 160
Gly	Asp	Gly	Ile	Val 165	Leu	Cys	Lys	Met	Ile 170	Asn	Leu	Ser	Val	Pro 175	Asp
Thr	Ile	Asp	Glu 180	Arg	Ala	Ile	Asn	Lys 185	Lys	Lys	Leu	Thr	Pro 190	Phe	Ile
Ile	Gln	Glu 195	Asn	Leu	Asn	Leu	Ala 200	Leu	Asn	Ser	Ala	Ser 205	Ala	Ile	Gly
Cys	His 210	Val	Val	Asn	Ile	Gly 215	Ala	Glu	Asp	Leu	Arg 220	Ala	Gly	Lys	Pro
His 225	Leu	Val	Leu	Gly	Leu 230	Leu	Trp	Gln	Ile	Ile 235	Lys	Ile	Gly	Leu	Phe 240
Ala	Asp	Ile	Glu	Leu 245	Ser	Arg	Asn		Ala 250		Ala	Ala	Leu	Leu 255	Arg

Asp	Gly	Glu	Thr 260		Glu	Glu	Leu	Met 265		Leu	Ser	Pro	G1u 270	Glu	Leu
Leu	Leu	Arg 275	Trp	Ala	Asn	Phe	His 280	Leu	Glu	Asn	Ser	Gly 285	Trp	Gln	Lys
Ile	Asn 290	Asn	Phe	Ser	Ala	Asp 295	Ile	Lys	Leu	Ile	Asp 300	Phe	Ser	Asn	Ser
Val 305		Asp	Ser	Lys	Ala 310	Tyr	Phe	His	Leu	Leu 315	Asn	Gln	Ile	Ala	Pro 320
Lys	Gly	Gln	Lys	Glu 325	Gly	Glu	Pro	Arg	11e 330	Asp	Ile	Asn	Met	Ser 335	Gly
Phe	Asn	Glu	Thr 340	Asp	Asp	Leu	Lys	Arg 345	Ala	Glu	Ser	Met	Leu 350	Gln	Gln
Ala	Asp	Lys 355	Leu	Gly	Суз	Arg	Gln 360	Phe	Val	Thr	Pro	Ala 365	Asp	Val	Val
Ser	Gly 370	Asn	Pro	Lys	Leu	Asn 375	Leu	Ala	Phe	Val	Ala 380	Asn	Leu	Phe	Asn
Lys 385	Туг	Pro	Ala	Leu	Thr 390	Lys	Pro	Glu	Asn	Gln 395	Asp	Ile	Asp	Trp	Thr 400
Leu	Leu	Glu	Gly	Glu 405	Thr	Arg	Glu	Glu	Arg 410	Thr	Phe	Arg	Asn	Trp 415	Met
Asn	Ser	Leu	Gly 420	Val	Asn	Pro	His	Val 425	Asn	His	Leu	Tyr	Ala 430	Asp	Leu
Gln	Asp	Ala 435	Leu	Val	Ile	Leu	Gln 440	Leu	Tyr	Glu	Arg	Ile 445	Lys	Val	Pro
Val	Asp 450	Trp	Ser	Lys	Val	Asn 455	Lys	Pro	Pro	Tyr	Pro 460	Lys	Leu	Gly	Ala
Asn 465	Met	Lys	Lys	Leu	Glu 470	Asn	Суз	Asn	Tyr	Ala 475	Val	Glu	Leu	Gly	Lys 480
His	Pro	Ala	Lys	Phe 485	Ser	Leu	Val	Gly	Ile 490		Gly	Gln	Asp	Leu 495	Asn
Asp	Gly	Asn	Gln 500	Thr	Leu	Thr	Leu	Ala 505	Leu	Val	Trp	Gln	Leu 510	Met	Arg
Arg		Thr 515	Leu	Asn	Val		Glu 520	Asp	Leu	Gly	Asp	Gly 525	Gln	Lys	Ala

Asn Asp Asp Ile Ile Val Asn Trp Val Asn Arg Thr Leu Ser Glu Ala 530 535 540

Gly Lys Ser Thr Ser Ile Gln Ser Phe Lys Asp Lys Thr Ile Ser Ser 545 550 555 560

Ser Leu Ala Val Val Asp Leu Ile Asp Ala Ile Gln Pro Gly Cys Ile 565 570 575

Asn Tyr Asp Leu Val Lys Ser Gly Asn Leu Thr Glu Asp Asp Lys His 580 585 590

Asn Asn Ala Lys Tyr Ala Val Ser Met Ala Arg Arg Ile Gly Ala Arg 595 600 605

Val Tyr Ala Leu Pro Glu Asp Leu Val Glu Val Lys Pro Lys Met Val 610 620

Met Thr Val Phe Ala Cys Leu Met Gly Arg Gly Met Lys Arg Val 625 630 635

<210> 1159

<211> 63

<212> PRT

<213> Homo sapiens

<400> 1159

Thr Ile Trp Pro Leu Asn Phe His Arg Lys Asn Asp Pro Thr Phe Leu 1 5 10 15

Ser Met Ser Tyr Leu Ile Ser Arg Ser Trp Asp Gly Leu Thr Ile Leu 20 25 30

Val Tyr Ile Leu Asp Thr Glu Arg Cys Tyr Ala Ser Val Ile Ile Pro 35 40 45

Arg Leu Glu Ile Gly Arg Ala Lys Lys Val Leu Leu Phe Phe Leu 50 55

<210> 1160

<211> 207

<212> PRT

<213> Homo sapiens

<400> 1160

Glu Val Tyr Gly Gly Ser Leu Asp Lys Glu Phe Asp Glu Ser Ser Pro

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Lys	Gln	Pro	Thr 20	Asn	Pro	туr	Ala	Ser 25	Ser	Lys	Ala	Ala	Ala 30	Glu	Cys
Phe	Val	Gln 35	Ser	туг	Trp	Glu	Gln 40	Tyr	Lys	Phe	Pro	Val 45	Val	Ile	Thr
Arg	Ser 50	Ser	Asn	Val	Tyr	Gly 55	Pro	His	Gln	Tyr	Pro 60	Glu	Lys	Val	Ile
Pro 65	Lys	Phe	Ile	Ser	Leu 70	Leu	Gln	His	Asn	Arg 75	Lys	Cys	Cys	Ile	His 80
Gly	Ser	Gly	Leu	Gln 85	Thr	Arg	Asn	Phe	Leu 90	туr	Ala	Thr	Asp	Val 95	Val
Glu	Ala	Phe	Leu 100	Thr	Val	Leu	Lys	Lys 105	Gly	Lys	Pro	Gly	Glu 110	Ile	Tyr
Asn	Ile	Gly 115	Thr	Asn	Phe	Glu	Met 120	Ser	Val	Val	Gln	Leu 125	Ala	Lys	Glu
Leu	11e 130	Gln	Leu	Ile	Lys	Glu 135	Thr	Asn	Ser	Glu	Ser 140	Glu	Met	Glu	Asn
Trp 145	Val	Asp	Tyr	Val	Asn 150	Asp	Arg	Pro	Thr	Asn 155	Asp	Met	Arg	Tyr	Pro 160
Met	Lys	Ser	Glu	Lys 165	Ile	His	Gly	Leu	Gly 170	Trp	Arg	Pro	Lys	Val 175	Pro
Trp	Lys	Glu	Gly 180	Ile	Lys	Lys	Thr	Ile 185	Glu	Trp	Tyr	Arg	Glu 190	Asn	Phe
His	Asn	Trp 195	Lys	Asn	Val	Glu	Lys 200	Ala	Leu	Glu	Pro	Phe 205	Pro	Val	
)> 11														
	l> 84 !> PF														
	!> Hc		apie	ens											
<220)>														
	> SI	TE													
	!> (8	•													
<223	> Xa	a ec	juals	any	of	the	natu	rall	Ly oc	curi	ing	L-ar	nino	acid	ls

<220>

	1> s														
	2> (e				1		_ ·				
~ 22	3> X	aa e	qual	s an	у ог	tne	nat	uraı	ту с	ccur	ring	L-a	mıno	acı	ds
<40	0> 1	161													
Ala	Leu	Gly	Leu	Gly	Val	Thr	Met	Ala	Thr	Glu	Glu	Phe	Ile	Ile	Are
1				5					10)			•	15	
Ile	Pro	Pro	Tyr	His	Tyr	Ile	His	Val	Leu	Asp	Gln	Asn	Ser	Asn	Va:
			20					25					30		
Ser	Ara	۷al	Glu	Va I	ci v	Pro	Tare	Thr	Ф 127	· Tla	Ara	G1n	7 cn) co	C1.
JC1	AL 9	35	GIU	vai	GLY	FIO	40	1111	ıyı	Tie	ALG	45	_	ASII	GI
Arg		Leu	Phe	Ala	Pro		Arg	Met	Val	Thr		Pro	Pro	Arg	His
	50					55					60				
Tyr	Cys	Thr	Val	Ala	Asn	Pro	Val	Ser	Arq	Asp	Ala	Gln	Glv	Leu	Va]
65					70				_	75			•		80
		_			_	_									
Leu	Phe	Asp	Val	Thr 85	Gly	Gln	Val	Arg	Leu 90		His	Ala	Asp		Glu
				65					90					95	
Ile	Arg	Leu	Ala	Gln	Asp	Pro	Phe	Pro	Leu	Tyr	Pro	Gly	Glu	Val	Let
			100					105					110		
GI 11	Lve	Acn	Ile	Th.	Pro	Len	Gl n	175 1	17 a 3	T ou	Dro	200	Mb =	71-	T
	1 10	115	110	1111	110	Беп	120	Val	val	neu	PLO	125	1111	ALG	Ten
His		Lys	Ala	Leu	Leu		Phe	Glu	Asp	Lys		Gly	Asp	Lys	Val
	130					135					140				
Val	Ala	Gly	Asp	Glu	Trp	Leu	Phe	Glu	Gly	Pro	Gly	Thr	Tyr	Ile	Pro
145		•	_		150				•	155	•		•		160
	_														
arg	Lys	GIU	Val	165	Val	Val	Glu	Ile	11e 170	Gln	Ala	Thr	Ile	11e	Arg
				103					170					1/3	
Gln	Asn	Gln	Ala	Leu	Arg	Leu	Arg	Ala	Arg	Lys	Glu	Cys	Trp	Asp	Arg
			180	•				185					190		
y a v	C) v	T.ve	Glu	Ara	17 a 1	Thr	G1v	C1	C1	m~~	T 011	*** 1	mb	mb	17-1
	O.J	195	, ,	my	V4.1	****	200	GIU	GLU	пр	Dea	205	1111	THE	. val
31y		Tyr	Leu	Pro	Ala		Phe	Glu	Glu	Val		Asp	Leu	Val	Asp
	210					215					220				
Ala	Val	Ile	Leu	Thr	Glu	Lys	Thr	Ala	Leu	His	Leu	Ara	Ala	Ara	Ara
225					230	-	-			235		3		5	240

Asn Phe Arg Asp Phe Arg Gly Val Ser Arg Arg Thr Gly Glu Glu Trp

				245					250					255	
Leu	Val	Thr	Val 260		Asp	Thr	Glu	Ala 265		Val	Pro	Asp	Val 270		Glu
Glu	Val	Leu 275		Val	Val	Pro	Ile 280		Thr	Leu	Gly	Pro 285		Asn	Tyr
Cys	Val 290		Leu	Asp	Pro	Val 295		Pro	Asp	Gly	Lys 300		Gln	Leu	Gly
Gln 305	Lys	Arg	Val	Val	Lys 310	Gly	Glu	Lys	Ser	Phe 315	Phe	Leu	Gln	Pro	Gly 320
Glu	Gln	Leu	Glu	Gln 325	Gly	Ile	Gln	Asp	Val 330	Tyr	Val	Lèu	Ser	Glu 335	
Gln	Gly	Leu	Leu 340	Leu	Arg	Ala	Leu	Gln 345	Pro	Leu	Glu	Glu	Gly 350	Glu	Asp
Glu	Glu	Lys 355	Val	Ser	His	Gln	Ala 360	Gly	Asp	His	Trp	Leu 365	Ile	Arg	Gly
Pro	Leu 370	Glu	Tyr	Val	Pro	Ser 375	Ala	Lys	Val	Glu	Val 380	Val	Glu	Glu	Arg
Gln 385	Ala	Ile	Pro	Leu	Asp 390	Glu	Asn	Glu	Gly	Ile 395	Tyr	Val	Gln	Asp	Val 400
Lys	Thr	Gly	Lys	Val 405	Arg	Ala	Val	Ile	Gly 410	Ser	Thr	Tyr	Met	Leu 415	Thr
Gln	Asp	Glu	Val 420	Leu	Trp	Glu	Lys	Glu 425	Leu	Pro	Pro	Gly	Val 430	Glu	Glu
Leu	Leu	Asn 435	Lys	Gly	Gln	Asp	Pro 440	Leu	Ala	Asp	Arg	Gly 445	Glu	Lys	Asp
Thr	Ala 450	Lys	Ser	Leu	Gln	Pro 455	Leu	Ala	Pro	Arg	Asn 460	Lys	Thr	Arg	Val
Val 465	Ser	Tyr	Arg	Val	Pro 470	His	Asn	Ala	Ala	Val 475	Gln	Val	Tyr	Asp	Tyr 480
Arg	Glu	Lys	Arg	Ala 485	Arg.	Val	Val	Phe	Gly 490	Pro	Glu	Leu	Val	Ser 495	Leu
Gly	Pro	Glu	Glu 500	Gln	Phe	Thr	Val	Leu 505	Ser	Leu	Ser	Ala	Gly 510	Arg	Pro
Lys	Arg	Pro	His	Ala	Arg	Arg	Ala	Leu	Суз	Leu	Leu	Leu	Gly	Pro	Asp

		515					520					525			
Phe	Phe 530	Thr	Asp	Val	Ile	Thr 535	Ile	Glu	Thr	Ala	Asp 540	His	Ala	Arg	Leu
Gln 545	Leu	Gln	Leu	Ala	туг 550	Asn	Trp	His	Phe	Glu 555	Val	Asn	Asp	Arg	Lys 560
Asp	Pro	Gln	Glu	Thr 565	Ala	Lys	Leu	Phe	Ser 570	Val	Pro	Asp	Phe	Val 575	Gly
Asp	Ala	Суз	Lys 580	Ala	Ile	Ala	Ser	Arg 585	Val	Arg	Gly	Ala	Val 590	Ala	Ser
Val	Thr	Phe 595	Asp	Asp	Phe	His	Lys 600	Asn	Ser	Ala	Arg	Ile 605	Ile	Arg	Thr
Ala	Val 610	Phe	Gly	Phe	Glu	Thr 615	Ser	Glu	Ala	Lys	Gly 620	Pro	Asp	Gly	Met
Ala 625	Leu	Pro	Arg	Pro	Arg 630	Asp	Gln	Ala	Val	Phe 635	Pro	Gln	Asn	Gly	Leu 640
Val	Val	Ser	Ser	Val 645	Asp	Val	Gln	Ser	Val 650	Glu	Pro	Val	Asp	Gln 655	Arg
Thr	Arg	Asp	Ala 660	Leu	Gln	Arg	Ser	Val 665	Gln	Leu	Ala	Ile	Glu 670	Ile	Thr
Thr	Asn	Ser 675	Gln	Glu	Ala	Ala	Ala 680	Lys	His	Glu	Ala	Gln 685	Arg	Leu	Glu
Gln	Glu 690	Ala	Arg	Gly	Arg	Leu 695	Glu	Arg	Gln	Lys	Ile 700	Leu	Asp	Gln	Ser
Glu 705	Ala	Glu	Lys	Ala	Arg 710	Lys	Glu	Leu	Leu	Glu 715	Leu	Glu	Ala	Leu	Ser 720
Met	Ala	Val	Glu	Ser 725	Thr	Gly	Thr	Ala	Lys 730	Ala	Glu	Ala	Glu	Ser 735	Arg
Ala	Glu	Ala	Ala 740	Arg	Ile	Glu	Gly	Glu 745	Gly	Ser	Val	Leu	Gln 750	Ala	Lys
Leu	Lys	Ala 755	Gln	Ala	Leu	Ala	Ile 760	Glu	Thr	Glu	Ala	Glu 765	Leu	Gln	Arg
Val	Gln 770	Lys	Val	Arg	Glu	Leu 775	Glu	Leu	Val	Tyr	Ala 780	Arg	Ala	Gln	Leu
Glu	Leu	Glu	Val	Ser	Lys	Ala	Gln	Gln	Leu	Ala	Glu	Val	Glu	Val	Lys

1174

785 790 795 800

Lys Phe Lys Gln Met Thr Glu Ala Ile Gly Pro Ser Thr Ile Xaa Asp 805 810 815

Leu Ala Val Ala Gly Pro Glu Met Gln Val Lys Leu Gln Ser Leu 820 825 830

Gly Leu Lys Ser Thr Leu Ile Thr Asp Gly Phe Xaa Ser Ile Asn Phe 835 840 845

<210> 1162

<211> 58

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (28)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1162

Phe Xaa Val Gly Ile Val Asn Phe Ser Gln Pro Pro His Ala Ala Gly
1 5 10 15

Glu Cys Gly Cys Ser Ser Ser Glu Met Leu Thr Xaa Lys Arg Glu Val 20 25 30

Lys Gln Ser Arg Tyr Val Gln Pro Cys Leu Gln Asn Pro Ser Leu Ser 35 40 45

Ser Leu Ile Arg Ser Phe Leu Val Phe Tyr 50 55

<210> 1163

<211> 565

<212> PRT

<213> Homo sapiens

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Gly	Trp	Arg 35	Asn	Val	Thr	Arg	Leu 40	Leu	Val	Phe	Ser	Thr 45	Asp	Ala	Gly
Phe	His 50	Phe	Ala	Gly	Asp	Gly 55	Lys	Leu	Gly	Gly	Ile 60	Val	Leu	Pro	Asn
Asp 65	Gly	Gln	Cys	His	Leu 70	Glu	Asn	Asn	Met	Tyr 75	Thr	Met	Ser	His	Tyr 80
Tyr	Asp	Tyr	Pro	Ser 85	Ile	Ala	His	Leu	Val 90	Gln	Lys	Leu	Ser	Glu 95	Asn
Asn	Ile	Gln	Thr 100	Ile	Phe	Ala	Val	Thr 105	Glu	Glu	Phe	Gln	Pro 110	Val	Tyr
Lys	Glu	Leu 115	Lys	Asn	Leu	Ile	Pro 120	Lys	Ser	Ala	Val	Gly 125	Thr	Leu	Ser
Ala	Asn 130	Ser	Ser	Asn	Val	Ile 135	Gln	Leu	Ile	Ile	Asp 140	Ala	Tyr	Asn	Ser
Leu 145	Ser	Ser	Glu	Val	Ile 150	Leu	Glu	Asn	Gly	Lys 155	Leu	Ser	Glu	Gly	Val 160
Thr	Ile	Ser	Tyr	Lys 165	Ser	Tyr	Суз	Lys	Asn 170	Gly	Val	Asn	Gly	Thr 175	Gly
Glu	Asn	Gly	Arg 180	Lys	Cys	Ser	Asn	Ile 185	Ser	Ile	Gly	Asp	Glu 190	Val	Gln
Phe	Glu	Ile 195	Ser	Ile	Thr	Ser	Asn 200	Lys	Cys	Pro	Lys	Lys 205	Asp	Ser	Asp
Ser	Phe 210	Lys	Ile	Arg	Pro	Leu 215	Gly	Phe	Thr	Glu	Glu 220	Val	Glu	Val	Ile
Leu 225	Gln	Tyr	Ile	Cys	Glu 230	Суз	Glu	Cys	Gln	Ser 235	Glu	Gly	Ile	Pro	Glu 240
Ser	Pro	Lys	Cys	His 245	Glu	Gly	Asn	Gly	Thr 250	Phe	Glu	Суз	Gly	Ala 255	Суз
Arg	Cys	Asn	Glu 260	Gly	Arg	Val	Gly	Arg 265	His	Суз	Glu	Cys	Ser 270	Thr	Asp

GIU	val	275	Ser	GIU	vaħ	met	280	ATG	TYL	cys	ALY	285	GIU	VOII	261
Ser	Glu 290	Ile	Cys	Ser	Asn	Asn 295	Gly	Glu	Cys	Val	Cys 300	Gly	Gln	Cys	Val
Cys 305	Arg	Lys	Arg	Asp	Asn 310	Thr	Asn	Glu	Ile	Tyr 315	Ser	Gly	Lys	Phe	Cys 320
Glu	Cys	Asp	Asn	Phe 325	Asn	Cys	Asp	Arg	Ser 330	Asn	Gly	Leu	Ile	Cys 335	Gly
Gly	Asn	Gly	Val 340	Cys	Lys	Суз	Arg	Val 345	Суѕ	Glu	Cys	Asn	Pro 350	Asn	Tyr
Thr	Gly	Ser 355	Ala	Cys	Asp	Cys	Ser 360	Leu	Asp	Thr	Ser	Thr 365	Cys	Glu	Ala
Ser	Asn 370	Gly	Gln	Ile	Суз	Asn 375	Gly	Arg	Gly	Ile	Cys 380	Glu	Суз	Gly	Val
Cys 385	Lys	Суз	Thr	Asp	Pro 390	Lys	Phe	Gln	Gly	Gln 395	Thr	Cys	Glu	Met	Cys 400
Gln	Thr	Cys	Leu	Gly 405	Val	Суз	Ala	Glu	His 410	Lys	Glu	Cys	Val	Gln 415	Cys
Arg	Ala	Phe	Asn 420	Lys	Gly	Glu	Lys	Lys 425	Asp	Thr	Cys	Thr	Gln 430	Glu	Cys
Ser	Tyr	Phe 435	Asn	Ile	Thr	Lys	Val 440	Glu	Ser	Arg	Asp	Lys 445	Leu	Pro	Gln
Pro	Val 450	Gln	Pro	Asp	Pro	Val 455	Ser	His	Суз	Lys	Glu 460	Lys	Asp	Val	Asp
Asp 465	Cys	Trp	Phe	Tyr	Phe 470	Thr	Tyr	Ser	Val	Asn 475	Gly	Asn	Asn	Glu	Val 480
Met	Val	His	Val	Val 485	Glu	Asn	Pro	Glu	Cys 490	Pro	Thr	Gly	Pro	Asp 495	Ile
lle	Pro	Ile	Val 500	Ala	Gly	Val	Val	Ala 505	Gly	Ile	Val	Leu	Ile 510	Gly	Leu
Ala	Leu	Leu 515	Leu	Ile	Trp	ГÀЗ	Leu 520	Leu	Met	Ile	Ile	His 525	Asp	Arg	Arg
Glu	Phe 530	Ala	Lys	Phe	Glu	Lys 535	Glu	Lys	Met	Asn	Ala 540	Lys	Trp	qeA	Thr

1177

Gly Glu Asn Pro Ile Tyr Lys Ser Ala Val Thr Thr Val Val Asn Pro 545 550 555 560

Lys Tyr Glu Gly Lys 565

<210> 1164

<211> 138

<212> PRT

<213> Homo sapiens

<400> 1164

Gly Thr Ala Gly Gly Ala Gly Gly Gln Arg Glu Val Arg Gly Cys Ser 1 5 10 15

Ala Gln Glu Thr Met Ser Gly Gly Ser Ser Cys Ser Gln Thr Pro Ser 20 25 30

Arg Ala Ile Pro Ala Thr Arg Arg Val Val Leu Gly Asp Gly Val Gln 35 40 45

Leu Pro Pro Gly Asp Tyr Ser Thr Thr Pro Gly Gly Thr Leu Phe Ser 50 60

Thr Thr Pro Gly Gly Thr Arg Ile Ile Tyr Asp Arg Lys Phe Leu Met 65 70 75 80

Glu Cys Arg Asn Ser Pro Val Thr Lys Thr Pro Pro Arg Asp Leu Pro 85 90 95

Thr Ile Pro Gly Val Thr Ser Pro Ser Ser Asp Glu Pro Pro Met Glu 100 105 110

Ala Ser Gln Ser His Leu Arg Asn Ser Pro Glu Asp Lys Arg Ala Gly
115 120 125

Gly Glu Glu Ser Gln Phe Glu Met Asp Ile 130 135

<210> 1165

<211> 407

<212> PRT

<213> Homo sapiens

<400> 1165

Ala Ala Cys Gln Pro Arg Cys Cys Cys Ser Ser Cys Cys Gly Thr Ala

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Asp	Arg	Ala	Ala 20	Ala	Pro	Leu	Ser	Pro 25	Leu	Gln	Ala	Pro	Ile 30	Trp	Ala
Pro	Ala	Thr 35	Ser	Met	Asp	Ala	Arg 40	Arg	Val	Pro	Gln	Lys 45	Asp	Leu	Arg
Val	Lys 50	Lys	Asn	Leu	Lys	Lys 55	Phe	Arg	Tyr	Val	Lys 60	Leu	Ile	Ser	Met
G1u 65	Thr	Ser	Ser	Ser	Ser 70	Asp	Asp	Ser	Cys	Asp 75	Ser	Phe	Ala	Ser	Asp 80
Asn	Phe	Ala	Asn	Thr 85	Arg	Leu	Gln	Ser	Val 90	Arg	Glu	Gly	Cys	Arg 95	Thr
Arg	Ser	Gln	Cys 100	Arg	His	Ser	Gly	Pro 105	Leu	Arg	Val	Ala	Met 110	Lys	Phe
Pro	Ala	Arg 115	Ser	Thr	Arg	Gly	Ala 120	Thr	Asn	Lys	Lys	Ala 125	Glu	Ser	Arg
Gln	Pro 130	Ser	Glu	Asn	Ser	Val 135	Thr	Asp	Ser	Asn	Ser 140	Asp	Ser	Glu	Asp
Glu 145	Ser	Gly	Met	Asn	Phe 150	Leu	Glu	Lys	Arg	Ala 155	Leu	Asn	Ile	Lys	Gln 160
Asn	Lys	Ala	Met	Leu 165	Ala	Lys	Leu	Met	Ser 170	Glu	Leu	Glu	Ser	Phe 175	Pro
Gly	Ser	Phe	Arg 180	Gly	Arg	His	Pro	Leu 185	Pro	Gly	Ser	Asp	Ser 190	Gln	Ser
Arg	Arg	Pro 195	Arg	Arg	Arg	Thr	Phe 200	Pro	Gly	Val	Ala	Ser 205	Arg	Arg	Asn
Pro	Glu 210	Arg	Arg	Ala	Arg	Pro 215	Leu	Thr	Arg	Ser	Arg 220	Ser	Arg	Ile	Leu
Gly 225	Ser	Leu	Asp	Ala	Leu 230	Pro	Met	Glu	Glu	Glu 235	Glü	Glu	Glu	Asp	Lys 240
Tyr	Met	Leu	Val	Arg 245	Lys	Arg	Lys	Thr	Val 250	Asp	Gly	Tyr	Met	Asn 255	Glu
Asp	Asp	Leu	Pro 260	Arg	Ser	Arg	Arg	Ser 265	Arg	Ser	Ser	Val	Thr 270	Leu	Pro
His	Ile	Ile	Ara	Pro	Val	Glu	Glu	Ile	Thr	Glu	Glu	Glu	Leu	Glu	Asn

<221> SITE <222> (202)

<220>
<221> SITE
<222> (219)

1179

275 280 285 Val Cys Ser Asn Ser Arg Glu Lys Ile Tyr Asn Arg Ser Leu Gly Ser 295 300 Thr Cys His Gln Cys Arg Gln Lys Thr Ile Asp Thr Lys Thr Asn Cys 310 315 Arg Asn Pro Asp Cys Trp Gly Val Arg Gly Gln Phe Cys Gly Pro Cys Leu Arg Asn Arg Tyr Gly Glu Glu Val Arg Asp Ala Leu Leu Asp Pro Asn Trp His Cys Pro Pro Cys Arg Gly Ile Cys Asn Cys Ser Phe Cys 360 Arg Gln Arg Asp Gly Arg Cys Ala Thr Gly Val Leu Val Tyr Leu Ala 375 Lys Tyr His Gly Phe Gly Asn Val His Ala Tyr Leu Lys Ser Leu Lys 390 395 400 Gln Glu Phe Glu Met Gln Ala 405 <210> 1166 <211> 240 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (197) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (201) <223> Xaa equals any of the naturally occurring L-amino acids <220>

<223> Xaa equals any of the naturally occurring L-amino acids

<22	3> X	aa e	qual	s an	y of	the	nat	ural	ly c	occur	ring	L-a	mino	aci	ds
	0> 1 Asp		Arg	Pro 5	Thr	Gly	Asp	Ala	Phe 10	e Val	Leu	Phe	Ala	Cys 15	Glu
Glu	Tyr	Ala	Gln 20		Ala	Leu	Arg	Lys 25	His	. Lys	Asp	Leu	Leu 30	Gly	Lys
Arg	Туг	Ile 35	Glu	Leu	Phe	Arg	Ser 40	Thr	Ala	Ala	Glu	Val 45	Gln	Gln	Val
Leu	Asn 50	Arg	Phe	Ser	Ser	Ala 55	Pro	Leu	Ile	Pro	Leu 60	Pro	Thr	Pro	Pro
Ile 65	Ile	Pro	Val	Leu	Pro 70	Gln	Gln	Phe	Val	. Pro 75	Pro	Thr	Asn	Val	Arg 80
Asp	Cys	Ile	Arg	Leu 85	Arg	Gly	Leu	Pro	Туг 90	Ala	Ala	Thr	Ile	Glu 95	Asp
Ile	Leu	Asp	Phe 100	Leu	Gly	Glu	Phe	Ala 105	Thr	Asp	Ile	Arg	Thr 110	His	Gly
Val	His	Met 115	Val	Leu	Asn	His	Gln 120	Gly	Arg	Pro	Ser	Gly 125	Asp	Ala	Phe
Ile	Gln 130	Met	Lys	Ser	Ala	Asp 135	Arg	Ala	Phe	Met	Ala 140	Ala	Gln	Lys	Суз
His 145	Lys	Lys	Asn	Met	Lys 150	Asp	Arg	Tyr	Val	Glu 155	Val	Phe	Gln	Cys	Ser 160
Ala	Glu	Glu	Met	Asn 165	Phe	Val	Leu	Met	Gly 170	Gly	Thr	Leu	Asn	Arg 175	Asn
Gly	Leu	Ser	Pro 180	Pro	Pro	Cys	Leu	Ser 185	Pro	Pro	Ser	туг	Thr 190	Phe	Pro
Ala	Pro	Ala 195	Ala	Xaa	Ile	Pro	Thr 200	Xaa	Xaa	Ala	Ile	Туг 205	Gln	Pro	Ser
Val	Ile 210	Leu	Asn	Pro	Arg	Ala 215	Leu	Gln	Pro	Xaa	Thr 220	Ala	Tyr	Tyr	Pro
Ala 225	Gly	Thr	Gln	Leu	Phe 230	Met	Asn	Tyr	Thr	Ala 235	Tyr	Tyr	Pro	Ser	Val 240

<210> 1167 <211> 106 <212> PRT <213> Homo sapiens <400> 1167 Gly Gly Tyr Ser Va

Gly Gly Tyr Ser Val Asp Ser Pro Thr Leu Thr Arg Phe Phe Thr Phe 1 5 10 15

His Phe Ile Leu Pro Phe Ile Ile Ala Ala Leu Ala Ala Leu His Leu 20 25 30

Leu Phe Leu His Glu Thr Gly Ser Asn Asn Pro Leu Gly Ile Thr Ser 35 40 45

His Ser Asp Lys Ile Thr Phe His Pro Tyr Tyr Thr Ile Lys Asp Ala 50 55 60

Leu Gly Leu Leu Leu Phe Leu Leu Ser Leu Met Thr Leu Thr Leu Phe
65 70 75 80

Ser Pro Asp Leu Leu Gly Asp Pro Asp Asn Tyr Thr Leu Ala Asn Pro 85 90 95

Leu Asn Thr Pro Pro His Ile Lys Pro Glu 100 105

<210> 1168

<211> 210

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (53)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1168

Gln His Val Gln Arg Glu Trp Ser Gly His Gly Glu Asp Arg Gly Asp 1 5 10 15

Gly Glu Asp Ala Glu Arg Gly Ser Cys Arg Glu Glu Pro Ala His Gly 20 25 30

Val Glu Gly Ala Gly Asp Gly Ala Ala Ala Ala Gly Pro Gly Gly 35 40 45

1182

Ala Ala Glu Ala Xaa Gln Val Glu Arg Arg Leu Gln Ser Glu Ser Ala 50 55 60

Arg Arg Gln Gln Leu Val Glu Lys Glu Val Lys Met Arg Glu Lys Gln 65 70 75 80

Phe Ser Gln Ala Arg Pro Leu Thr Arg Tyr Leu Pro Ile Arg Lys Glu 85 90 95

Asp Phe Asp Leu Lys Thr His Ile Glu Ser Ser Gly His Gly Val Asp 100 105 110

Thr Cys Leu His Val Val Leu Ser Ser Lys Val Cys Arg Gly Tyr Leu 115 120 125

Val Lys Met Gly Gly Lys Ile Lys Ser Trp Lys Lys Arg Trp Phe Val 130 135 140

Phe Asp Arg Leu Lys Arg Thr Leu Ser Tyr Tyr Val Asp Lys His Glu 145 150 155 160

Thr Lys Leu Lys Gly Val Ile Tyr Phe Gln Ala Ile Glu Gly Ser Val 165 170 175

Leu Arg Pro Pro Ala Pro Val Gln Pro Arg Arg Gly Phe Ser Ala Ser 180 185 190

Thr Met Val Thr Glu Lys Pro Glu Pro Ser Pro His Leu Leu Arg Lys 195 200 205

Asp Pro 210

<210> 1169

<211> 181

<212> PRT

<213> Homo sapiens

<400> 1169

Thr Ser Lys Met Arg Ser Leu Glu Thr Leu Gly Arg Pro Lys Pro Glu
1 5 10 15

Cys Glu Gly Tyr Asp Pro Asn Ala Leu Tyr Cys Ile Cys Arg Gln Pro

His Asn Asn Arg Phe Met Ile Cys Cys Asp Arg Cys Glu Glu Trp Phe 35 40 45

His Gly Asp Cys Val Gly Ile Ser Glu Ala Arg Gly Arg Leu Leu Glu

1183

55 60 50 Arg Asn Gly Glu Asp Tyr Ile Cys Pro Asn Cys Thr Ile Leu Gln Val 70 75 Gln Asp Glu Thr His Ser Glu Thr Ala Asp Gln Gln Glu Ala Lys Trp Arg Pro Gly Asp Ala Asp Gly Thr Asp Cys Thr Ser Ile Gly Thr Ile 105 Glu Gln Lys Ser Ser Glu Asp Gln Gly Ile Lys Gly Arg Ile Glu Lys 115 120 Ala Ala Asn Pro Ser Gly Lys Lys Leu Lys Ile Phe Gln Pro Val Ile Glu Ala Pro Gly Ala Ser Lys Cys Ile Gly Pro Gly Cys Cys His 155 Val Ala His Pro Thr Arg Cys Thr Ala Val Met Thr Val Ser Ser Asn 170 165 Thr Pro Gln Arg Gln 180 <210> 1170 . <211> 166 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (18). <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (131) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1170 Ala Gln Xaa Leu Ser Ser Pro Val Arg Gly Ile Ser Gly Glu Gln Ser 10

Thr Xaa Gly Ser Phe Pro Leu Arg Tyr Val Gln Asp Gln Val Ala Ala 20 25 30

Pro Phe Gln Leu Ser Asn His Thr Gly Arg Ile Lys Val Phe Thr 35 40 45

Pro Ser Ile Cys Lys Val Thr Cys Thr Lys Gly Ser Cys Gln Asn Ser 50 60

Cys Glu Lys Gly Asn Thr Thr Thr Leu Ile Ser Glu Asn Gly His Ala 65 70 75 80

Ala Asp Thr Leu Thr Ala Thr Asn Phe Arg Val Val Ile Cys His Leu 85 90 95

Pro Cys Met Asn Gly Gly Gln Cys Ser Ser Arg Asp Lys Cys Gln Cys 100 105 110

Pro Pro Asn Phe Thr Gly Lys Leu Cys Gln Ile Pro Val His Gly Ala 115 120 125

Ser Val Xaa Lys Leu Tyr Gln His Ser Gln Gln Pro Gly Lys Ala Leu 130 135 140

Gly Thr His Val Ile His Ser Thr His Thr Leu Pro Leu Thr Val Thr 145 150 155 160

Ser Gln Gln Glu Ser Lys 165

<210> 1171

<211> 37

<212> PRT

<213> Homo sapiens

<400> 1171

Asp Leu Ser Val Asn Phe Trp Glu Pro Asn Gly Phe Gly His Asp Phe 1 5 10 15

Pro Ala His Tyr Ile Leu Thr Gln Asn Phe Phe Arg Met Ala Phe Thr 20 25 30

Ser Thr Pro Glu Ile

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<211> 169
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<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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Pro Ala Val Leu Arg Xaa Ser Val Arg Gly Thr Phe Tyr Ser Pro Pro
                                 25
Glu Ser Phe Ala Gly Ser Asp Asn Glu Ser Asp Glu Glu Val Ala Gly
                              40
                                                  45
Lys Lys Ser Phe Ser Ala Gln Glu Arg Glu Tyr Ile Arg Gln Gly Lys
 . 50
Glu Ala Thr Ala Val Xaa Asp Gln Ile Leu Ala Gln Glu Glu Asn Trp
Lys Phe Glu Lys Asn Asn Glu Tyr Gly Asp Thr Val Tyr Thr Ile Glu
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1186

85 90 95 Val Pro Phe His Gly Lys Thr Phe Ile Leu Lys Thr Phe Leu Pro Cys 105 Pro Ala Xaa Xaa Val Tyr Gln Glu Val Ile Leu Gln Pro Glu Arg Met 120 Val Leu Trp Asn Lys Thr Val Thr Ala Cys Gln Ile Leu Gln Arg Val Glu Asp Asn Thr Leu Ile Ser Tyr Asp Val Ser Ala Arg Gly Cys Gly 150 Arg Arg Xaa Leu Pro Gln Xaa Thr Ser 165 <210> 1173 <211> 180 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (171) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1173 Glu Tyr Gly Asp Thr Val Tyr Thr Ile Glu Val Pro Phe His Gly Lys 5 Thr Phe Ile Leu Lys Thr Phe Leu Pro Cys Pro Ala Glu Leu Val Tyr Gln Glu Val Ile Leu Gln Pro Glu Arg Met Val Leu Trp Asn Lys Thr 40 Val Thr Ala Cys Gln Ile Leu Gln Arg Val Glu Asp Asn Thr Leu Ile Ser Tyr Asp Val Ser Ala Gly Ala Ala Gly Gly Val Val Ser Pro Arg Asp Phe Val Asn Val Arg Arg Ile Glu Arg Arg Arg Asp Arg Tyr Leu 90

Ser Ser Gly Ile Ala Thr Ser His Ser Ala Lys Pro Pro Thr His Lys

105

Tyr Val Arg Gly Glu Asn Gly Pro Gly Gly Phe Ile Val Leu Lys Ser 115 120 Ala Ser Asn Pro Arg Val Cys Thr Phe Val Trp Ile Leu Asn Thr Asp 135 Leu Lys Gly Arg Leu Pro Arg Tyr Leu Ile His Gln Ser Leu Ala Ala 155 150 Thr Met Phe Glu Phe Ala Phe His Leu Arg Xaa Arg Ile Ser Glu Leu 170 165 Gly Ala Arg Ala 180 <210> 1174 <211> 436 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (14) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (426) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1174 Arg His Gln Arg Arg Ser Val Trp Arg Ser Arg Gly Xaa Cys Cys Arg Cys Cys Cys Thr Asn Arg Arg Ser Pro Gln Pro Cys Ala Ser Ser Leu Pro Pro Arg Thr Gly Glu Lys Gln Pro Arg Asn Phe Met Asn Lys 35 His Gln Lys Pro Val Leu Thr Gly Gln Arg Phe Lys Thr Arg Lys Arg Asp Glu Lys Glu Lys Phe Glu Pro Thr Val Phe Arg Asp Thr Leu Val 75

Gln Gly Leu Asn Glu Ala Gly Asp Asp Leu Glu Ala Val Ala Lys Phe

Leu	Asp	Ser	Thr 100	Gly	Ser	Arg	Leu	Asp 105	Tyr	Arg	Arg	Tyr	Ala 110	Asp	Th:
Leu	Phe	Asp 115	Ile	Leu	Val	Ala	Gly 120	Ser	Met	Leu	Ala	Pro 125	Gly	Gly	Th
Arg	Ile 130	Asp	Asp	Gly	Asp	Lys 135	Thr	Lys	Met	Thr	Asn 140	His	Суз	Val	Pho
Ser 145	Ala	Asn	Glu	Asp	His 150	Glu	Thr	Ile	Arg	Asn 155	Tyr	Ala	Gln	Val	Pho 160
Asn	Lys	Leu	Ile	Arg 165	Arg	Tyr	Lys	Tyr	Leu 170	Glu	Lys	Ala	Phe	Glu 175	Ası
Glu	Met	Lys	Lys 180	Leu	Leu	Leu	Phe	Leu 185	Lys	Ala	Phe	Ser	Glu 190	Thr	Gl
Gln	Thr	Lys 195	Leu	Ala	Met	Leu	Ser 200	Gly	Ile	Leu	Leu	Gly 205	Asn	Gly	Th
Leu	Pro 210	Ala	Thr	Ile	Leu	Thr 215	Ser	Leu	Phe	Thr	Asp 220	Ser	Leu	Val	Ly
Glu 225	Gly	Ile	Ala	Ala	Ser 230	Phe	Ala	Val	Lys	Leu 235	Phe	Lys	Ala	Trp	Me1
Ala	Glu	Lys	Asp	Ala 245	Asn	Ser	Val	Thr	Ser 250	Ser	Leu	Arg	Lys	Ala 255	Ası
Leu	Asp	Lys	Arg 260	Leu	Leu	Glu	Leu	Phe 265	Pro	Val	Asn	Arg	Gln 270	Ser	Va:
Asp	His	Phe 275	Ala	Lys	Tyr	Phe	Thr 280	Asp	Ala	Gly	Leu	Lys 285	Glu	Leu	Sei
Asp	Phe 290	Leu	Arg	Val	Gln	Gln 295	Ser	Leu	Gly	Thr	Arg 300	Lys	Glu	Leu	Glı
Lys 305	Glu	Leu	Gln	Glu	Arg 310	Leu	Ser	Gln	Glu	Cys 315	Pro	Ile	Lys	Glu	Va:
Val	Leu	Tyr	Val	Lys 325	Glu	Glu	Met	Lys	Arg 330	Asn	Asp	Leu	Pro	Glu 335	Thi
Ala	Val	Ile	Gly 340	Leu	Leu	Trp	Thr	Cys 345	Ile	Met	Asn	Ala	Val 350	Glu	Tr
Asn		Lys 355	Glu		Leu				Gln	Ala		Lys 365	His	Leu	Lys

<210> 1175 <211> 366 <212> PRT <213> Homo sapiens

<400> 1175

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1 5 10 15

Ser Leu Gly Ala Leu Leu Leu Leu Ser Ala Cys Leu Ala Val Ser 20 25 30

Ala Gly Pro Val Pro Thr Pro Pro Asp Asn Ile Gln Val Gln Glu Asn $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Phe Asn Ile Ser Arg Ile Tyr Gly Lys Trp Tyr Asn Leu Ala Ile Gly 50 60

Ser Thr Cys Pro Trp Leu Lys Lys Ile Met Asp Arg Met Thr Val Ser 65 70 75 80

Thr Leu Val Leu Gly Glu Gly Ala Thr Glu Ala Glu Ile Ser Met Thr 85 90 95

Ser Thr Arg Trp Arg Lys Gly Val Cys Glu Glu Thr Ser Gly Ala Tyr 100 105 110

Glu Lys Thr Asp Thr Asp Gly Lys Phe Leu Tyr His Lys Ser Lys Trp 115 120 125

Asn Ile Thr Met Glu Ser Tyr Val Val His Thr Asn Tyr Asp Glu Tyr 130 135 140

Ala Ile Phe Leu Thr Lys Lys Phe Ser Arg His His Gly Pro Thr Ile

145					150					155					160
Thr	Ala	Lys	Leu	Tyr 165	Gly	Arg	Ala	Pro	Gln 170		Arg	Glu	Thr	Leu 175	Leu
Gln	Asp	Phe	Arg 180	Val	Val	Ala	Gln	Gly 185	Val	Gly	Ile	Pro	Glu 190	Asp	Ser
Ile	Phe	Thr 195	Met	Ala	Asp	Arg	Gly 200	Glu	Суз	Val	Pro	Gly 205	Glu	Gln	Glu
Pro	Glu 210	Pro	Ile	Leu	Ile	Pro 215	Arg	Val	Arg	Arg	Ala ·220	Val	Leu	Pro	Gln
Glu 225	Glu	Glu	Gly	Ser	Gly 230	Gly	Gly	Gln	Leu	Val 235	Thr	Glu	Val	Thr	Lys 240
Lys	Glu	Asp	Ser	Cys 245	Gln	Leu	Gly	Tyr	Ser 250	Ala	Gly	Pro	Суз	Met 255	Gly
Met	Thr	Ser	Arg 260	Tyr	Phe	Tyr	Asn	Gly 265	Thr	Ser	Met	Ala	Cys 270	Glu	Thr
Phe	Gln	Tyr 275	Gly	Gly	Cys	Met	Gly 280	Asn	Gly	Asn	Asn	Phe 285	Val	Thr	Glu
Lys	Glu 290	Cys	Leu	Gln	Thr	Cys 295	Arg	Thr	Val	Ala	Ala 300	Cys	Asn	Leu	Pro
Ile 305	Val	Arg	Gly	Pro	Cys 310	Arg	Ala	Phe	Ile	Gln 315	Leu	Trp	Ala	Phe	Asp 320
Ala	Val	Lys	Gly	Lys 325	Суз	Val	Leu	Phe	Pro 330	Tyr	Gly	Gly	Cys	Gln 335	Gly
Asn	Gly	Asn	Lys 340	Phe	Tyr	Ser	Glu	Lys 345	Glu	Cys	Arg	Glu	Tyr 350	Суз	Gly
Val	Pro	Gly 355	Asp	Gly	Asp	Glu	Glu 360	Leu	Leu	Arg	Phe	Ser 365	Asn		
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<211> 133 <212> PRT <213> Homo sapiens <220>

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Trp	Leu	Arg	Ala 20		Ile	Leu	Ala	Thr 25	Leu	Ser	Ala	Ser	Ala 30	Ala	Trp
Ala	Gly	His 35		Ser	Ser	Pro	Pro 40	Val	Val	Asp	Thr	Val 45	His	Gly	Lys
Val	Leu 50		Lys	Phe	Val	Ser 55	Leu	Glu	Gly	Phe	Ala 60	Gln	Pro	Val	Ala
Ile 65	Phe	Leu	Gly	Ile	Pro 70	Phe	Ala	Lys	Pro	Pro 75	Leu	Gly	Pro	Leu	Arg 80
Phe	Thr	Pro	Pro	Gln 85	Pro	Ala	Glu	Pro	Trp 90		Phe	Val	Lys	Asn 95	Ala
Thr	Ser	Tyr	Pro 100	Pro	Met	Суз	Thr	Gln 105	Asp	Pro	Lys	Ala	Gly 110	Gln	Leu
Leu	Ser	Glu 115	Leu	Phe	Thr	Asn	Arg 120	Lys	Glu	Asn	Ile	Pro 125	Leu	Lys	Leu
Ser	Glu 130	Asp	Cys	Leu	Tyr	Leu 135	Asn	Ile	Tyr	Thr	Pro 140	Ala	Asp	Leu	Thr
Lys 145	Lys	Asn	Arg	Leu	Pro 150	Val	Met	Val	Trp	11e 155	His	Gly	Gly	Gly	Leu 160
Met	Val	Gly	Ala	Ala 165	Ser	Thr	Tyr	Asp	Gly 170	Leu	Ala	Leu	Ala	Ala 175	His
Glu	Asn	Val	Val 180	Val	Val	Thr	Ile	Gln 185	Tyr	Arg	Leu	Gly	Ile 190	Trp	Gly
Phe	Phe	Ser 195	Thr	Gly	Asp	Glu	His 200	Ser	Arg	Gly	Asn	Trp 205	Gly	His	Leu
Asp	Gln 210	Val	Ala	Ala	Leu	Arg 215	Trp	Val	Gln	Asp	Asn 220	Ile	Ala	Ser	Phe
Gly 225	Gly	Asn	Pro	Gly	Ser 230	Val	Thr	Ile	Phe	Gly 235	Glu	Ser	Ala	Gly	Gly 240
Glu	Ser	Val	Ser	Val 245	Leu	Val	Leu	Ser	Pro 250	Leu	Ala	Lys	Asn	Leu 255	Phe
His	Arg	Ala	Ile 260	Ser	Glu	Ser	Gly	Val 265	Ala	Leu	Thr	Ser	Val 270	Leu	Val
Lys		Gly 275	Asp	Val	Lys	Pro	Leu 280	Ala	Glu	Gln	Ile	Ala 285	Ile	Thr	Ala

GIÀ	290	_	Thr	Thr	Thr	Ser 295		Val	Met	Val	300	-	Leu	Arg	(Gl
Lys 305		Glu	Glu	Glu	Leu 310	Leu	Glu	Thr	Thr	Leu 315	_	Met	. Lys	Phe	32
Ser	Leu	Asp	Leu	Gln 325	Gly	Asp	Pro	Arg	Glu 330		Gln	Pro	Leu	Leu 335	
Thr	Val	Ile	340		Met	Leu	Leu	Leu 345		Thr	Pro	Glu	350		Glı
		355			His		360					365			
	370				Leu	375					380				
385					Asp 390					395					400
				405	Cys				410					415	
			420		Gly			425					430		
		435			Arg		440					445			
	450				Ser	455					460				
465					470 Asp					475					480
				485	Ser				490					495	
			500		Asn			505					510		
		515			Pro		520					525			
	530				Gln	535					540				
545	- -y		.1311	1111	550	urd	WT.	OTH	ny s	555	ηγ	ush	ոչո	GIU	560

Ala Phe Trp Thr Asn Leu Phe Ala Lys Lys Ala Val Glu Lys Pro Pro 565 570 575

Gln Thr Glu His Ile Glu Leu 580

<210> 1178

<211> 98

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1178

Pro Gly Arg Xaa Gln Leu Arg Ala Lys Phe Ser Cys Pro Pro Ala Asp 1 5 10 15

Arg Val Asn Val Thr Val Arg Pro Gly Leu Ala Met Ala Leu Ser Gly
20 25 30

Ser Thr Glu Pro Cys Ala Gln Leu Ser Ile Ser Ser Ile Gly Val Val 35 40 45

Gly Thr Ala Glu Asp Asn Arg Ser His Ser Ala His Phe Phe Glu Phe 50 55 60

Leu Thr Lys Glu Leu Ala Leu Gly Gln Asp Arg Ile Leu Ile Arg Phe 65 70 75 80

Phe Pro Leu Glu Ser Trp Gln Ile Gly Lys Ile Gly Thr Val Met Thr
85 90 95

Phe Leu

<210> 1179

<211> 127

<212> PRT

<213> Homo sapiens

<220>

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<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220> <221> SITE <222> (50) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (67) <223> Xaa equals any of the naturally occurring L-amino acids Phe Arg Pro Ala Val Ser Xaa Gly Ser Leu Cys Leu Pro Ala Arg Thr 10 Ala His Ser Pro Ala Ser Ser Ala Ala Cys Arg Thr Met Ala Gln Gly 20 Gln Arg Lys Phe Gln Ala His Lys Pro Ala Lys Ser Lys Thr Ala Ala Ala Xaa Ser Glu Lys Asn Arg Gly Pro Arg Lys Gly Gly Arg Val Ile Ala Pro Xaa Lys Ala Arg Val Val Gln Gln Lys Leu Lys Lys Asn Leu Glu Val Gly Ile Arg Lys Lys Ile Glu His Asp Val Val Met Lys Ala Ser Ser Ser Leu Pro Lys Lys Leu Ala Leu Leu Lys Ala Pro Ala 105 Lys Lys Lys Gly Ala Ala Ala Ala Thr Ser Ser Lys Thr Pro Ser 120 <210> 1180 <211> 94 <212> PRT <213> Homo sapiens <400> 1180 Ser Ser Tyr Arg Ser Lys Ala Tyr Thr His Thr Lys Ile Thr Val Pro

Arg Glu Arg Val Cys Val Ser Val Arg Val Ser Val Cys Ala Arg Ala
20 25 30

Arg Ser Trp Pro Asn Val Arg Thr Leu His Lys Gly Gly Arg Ser Ser

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1196

45 40 35 Tyr Arg Leu Phe Asn Val Arg Glu Thr Ile Phe Leu Leu Phe Gln Leu Tyr Gln Ile Leu Val Pro Gln His Arg Asn Asp Ser Glu Ser Gln Thr Lys Cys Ile Ile Cys Ser Ile Leu Ile Leu Leu His Ser <210> 1181 <211> 353 <212> PRT <213> Homo sapiens <400> 1181 Gly Ser Leu Asp Leu Trp Arg Gly Ala Glu Leu Ser Pro Gly His Ser Thr Leu Phe Thr Leu Cys Ala Cys Ala Lys Gly Ala Met Ala Ala Ser 20 Cys Val Leu Leu His Thr Gly Gln Lys Met Pro Leu Ile Gly Leu Gly 40 Thr Trp Lys Ser Glu Pro Gly Gln Val Lys Ala Ala Val Lys Tyr Ala 50 55 Leu Ser Val Gly Tyr Arg His Ile Asp Cys Ala Ala Ile Tyr Gly Asn Glu Pro Glu Ile Gly Glu Ala Leu Lys Glu Asp Val Gly Pro Gly Lys Ala Val Pro Arg Glu Glu Leu Phe Val Thr Ser Lys Leu Trp Asn Thr 100 105 Lys His His Pro Glu Asp Val Glu Pro Ala Leu Arg Lys Thr Leu Ala 120 Asp Leu Gln Leu Glu Tyr Leu Asp Leu Tyr Leu Met His Trp Pro Tyr 130 135 Ala Phe Glu Arg Gly Asp Asn Pro Phe Pro Lys Asn Ala Asp Gly Thr

Ile Cys Tyr Asp Ser Thr His Tyr Lys Glu Thr Trp Lys Ala Leu Glu

Ala	Leu	Val	Ala 180	Lys	Gly	Leu	Val	Gln 185	Ala	Leu	Gly	Leu	Ser 190	Asn	Phe
Asn	Ser	Arg 195	Gln	Ile	Asp	Asp	Ile 200	Leu	Ser	Val	Ala	Ser 205	Val	Arg	Pro
Ala	Val 210	Leu	Gln	Val	Glu	Cys 215	His	Pro	Tyr	Leu	Ala 220	Gln	Asn	Glu	Leu
Ile 225	Ala	His	Cys	Gln	Ala 230	Arg	Gly	Leu	Glu	Val 235	Thr	Ala	Tyr	Ser	Pro 240
Leu	Gly	Ser	Ser	Asp 245	Arg	Ala	Trp	Arg	Asp 250	Pro	Asp	Glu	Pro	Val 255	Let
Leu	Glu	Glu	Pro 260	Val	Val	Leu	Ala	Leu 265	Ala	Glu	Lys	Tyr	Gly 270	Arg	Ser
Pro	Ala	Gln 275	Ile	Leu	Leu	Arg	Trp 280	Gln	Val	Gln	Arg	Lys 285	Val	Ile	Суз
Ile	Pro 290	Lys	Ser	Ile	Thr	Pro 295	Ser	Arg	Ile	Leu	Gln 300	Asn	Ile	Lys	Val
Phe 305	Asp	Phe	Thr	Phe	Ser 310	Pro	Glu	Glu	Met	Lys 315	Gln	Leu	Asn	Ala	Leu 320
Asn	Lys	Asn	Trp	Arg 325	Tyr	Ile	Val	Pro	Met 330	Leu	Thr	Val	Asp	Gly 335	Lys
Arg	Val	Pro	Arg 340	Asp	Ala	Gly	His	Pro 345	Leu	Tyr	Pro	Phe	Asn 350	Asp	Pro
Tyr															

<210> 1182

<211> 174

<212> PRT

<213> Homo sapiens

<400> 1182

Ala Arg Asp Ser Leu Gln Leu Ser Met Ala Gln Thr Ser Ser Tyr Phe 1 5 10 15

Met Leu Ile Ser Cys Leu Met Phe Leu Ser Gln Ser Gln Gly Gln Glu \cdot 20 25 30

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Ala Gln Thr Glu Leu Pro Gln Ala Arg Ile Ser Cys Pro Glu Gly Thr
35 40 45

Asn Ala Tyr Arg Ser Tyr Cys Tyr Tyr Phe Asn Glu Asp Arg Glu Thr 50 55 60

Trp Val Asp Ala Asp Leu Tyr Cys Gln Asn Met Asn Ser Gly Asn Leu 65 70 75 80

Val Ser Val Leu Thr Gln Ala Glu Gly Ala Phe Val Ala Ser Leu Ile 85 90 95

Lys Glu Ser Gly Thr Asp Asp Phe Asn Val Trp Ile Gly Leu His Asp . 100 105 110

Pro Lys Lys Asn Arg Arg Trp His Trp Ser Ser Gly Ser Leu Val Ser 115 120 125

Tyr Lys Ser Trp Gly Ile Gly Ala Pro Ser Ser Val Asn Pro Gly Tyr 130 135 140

Cys Val Ser Leu Thr Ser Ser Thr Gly Phe Gln Lys Trp Lys Asp Val 145 150 155 160

Pro Cys Glu Asp Lys Phe Ser Phe Val Cys Lys Phe Lys Asn 165 170

<210> 1183

<211> 342

<212> PRT

<213> Homo sapiens

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<221> SITE

<222> (169)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (171)

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<220>

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<222> (187)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

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	0> 1> 5: 2> (:														
	_		qual	s any	y of	the	nati	ıral	ly o	ccur	ring	L-ar	nino	acio	is
	0> 1: Ile		Ser	Tyr	Ile	Arg	Leu	Glu	Leu	Pro	Ser	Met	Trp	Leu	Leu
1				5					10					15	
Val	Ser	Val	Ile 20	Leu	Ile	Ser	Arg	Ile 25	Ser	Ser	Val	Gly	Gly 30	Glu	Ala
Chr	Phe	Cys 35	Asp	Phe	Pro	Lys	Ile 40	Asn	His	Gly	Ile	Leu 45	Tyr	Asp	Glu
Glu	Lys 50	Tyr	Lys	Pro	Phe	Ser 55	Gln	Val	Pro	Thr	Gly 60	Glu	Val	Phe	Tyr
fyr 65	Ser	Cys	Glu	Tyr	Asn 70	Phe	Val	Ser	Pro	Ser 75	Lys	Ser	Phe	Trp	Thr 80
Arg	Ile	Thr	Суѕ	Thr 85	Glu	Glu	Gly	Trp	Ser 90	Pro	Thr	Pro	Lys	Cys 95	Leu
Arg	Leu	Cys	Phe 100	Phe	Pro	Phe	Val	Glu 105	Asn	Gly	His	Ser	Glu 110	Ser	Ser
Sly	Gln	Thr 115	His	Leu	Glu	Gly	Asp 120	Thr	Val	Gln	Ile	Ile 125	Cys	Asn	Thr
Sly	Tyr 130	Arg	Leu	Gln	Asn	Asn 135	Glu	Asn	Asn	Ile	Ser 140	Cys	Val	Glu	Arg
31y 145	Trp	Ser	Thr	Pro	Pro 150	Lys	Cys	Arg	Ser	Thr 155	Asp	Thr	Ser	Cys	Val 160
Asn	Pro	Pro	Thr	Val 165	Gln	Asn	Ala	Xaa	Ile 170	Xaa	Ser	Arg	Gln	Met 175	Ser
ys	Tyr	Pro	Ser 180	Gly	Glu	Arg	Val	Arg 185	Tyr	Xaa	Cys	Arg	Ser 190	Pro	Tyr
Slu	Met	Phe 195	Gly	Asp	Glu	Glu	Val 200	Met	Cys	Leu	Asn	Gly 205	Asn	Trp	Thr
lu	Pro	Pro	Gln	Cys	_	Asp	Ser	Thr	Gly	Lys	Cys	Gly	Pro	Pro	Pro

Pro Ile Asp Asn Gly Asp Ile Thr Ser Phe Pro Leu Ser Val Tyr Ala 225 230 235 Pro Ala Ser Ser Val Glu Tyr Gln Cys Gln Asn Leu Tyr Gln Leu Glu Gly Asn Lys Arg Ile Thr Cys Arg Asn Gly Gln Trp Ser Glu Pro Pro 265 Lys Cys Leu His Pro Cys Val Ile Ser Arg Glu Ile Met Glu Asn Tyr 280 Asn Ile Ala Leu Arg Trp Thr Ala Lys Gln Lys Leu Tyr Xaa Arg Thr Gly Glu Ser Xaa Glu Phe Val Cys Lys Arg Gly Tyr Arg Leu Ser Ser 305 310 315 Arg Ser His Thr Leu Arg Thr Thr Cys Trp Asp Gly Lys Leu Glu Tyr 325 330 Pro Thr Cys Ala Lys Arg 340 <210> 1184 <211> 198 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (161) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1184 Pro Xaa Arg Pro Arg Gly Ala Ala Ala Ala Ala Ala Ala Ala Gly Ala Ala Met Pro Lys Gly Gly Arg Lys Gly His Lys Gly Arg Ala Arg 25

Gln Tyr Thr Ser Pro Glu Glu Ile Asp Ala Gln Leu Gln Ala Glu Lys

40

Gln Lys Ala Arg Glu Glu Glu Glu Gln Lys Glu Gly Gly Asp Gly Ala
50 55 60

Ala Gly Asp Pro Lys Lys Glu Lys Lys Ser Leu Asp Ser Asp Glu Ser 65 70 75 80

Glu Asp Glu Glu Asp Asp Tyr Gln Gln Lys Arg Lys Gly Val Glu Gly 85 90 95

Leu Ile Asp Ile Glu Asn Pro Asn Arg Val Ala Gln Thr Thr Lys Lys
100 105 110

Val Thr Gln Leu Asp Leu Asp Gly Pro Lys Glu Leu Ser Arg Arg Glu 115 120 125

Arg Glu Glu Ile Glu Lys Gln Lys Ala Lys Glu Arg Tyr Met Lys Met 130 135 140

His Leu Ala Gly Lys Thr Glu Gln Ala Lys Ala Asp Leu Ala Arg Leu 145 150 155 160

Xaa Ile Ile Arg Lys Gln Arg Glu Glu Ala Ala Arg Lys Lys Glu Glu 165 170 175

Glu Arg Lys Ala Lys Asp Asp Ala Thr Leu Ser Gly Lys Arg Met Gln 180 185 190

Ser Leu Ser Leu Asn Lys 195

<210> 1185

<211> 210

<212> PRT

<213> Homo sapiens

<400> 1185

Ala His Ala Ser Ala His Ala Ser Gly Met Asp Leu Ser Leu Leu Trp

1 5 10 15

Val Leu Leu Pro Leu Val Thr Met Ala Trp Gly Gln Tyr Gly Asp Tyr
20 25 30

Gly Tyr Pro Tyr Gln Gln Tyr His Asp Tyr Ser Asp Asp Gly Trp Val 35 40 45

Asn Leu Asn Arg Gln Gly Phe Ser Tyr Gln Cys Pro Gln Gly Gln Val 50 60

Ile Val Ala Val Arg Ser Ile Phe Ser Lys Lys Glu Gly Ser Asp Arg

65					70					75					80
Gln	Trp	Asn	Tyr	Ala 85	Cys	Met	Pro	Thr	Pro 90	Gln	Ser	Leu	Gly	Glu 95	Pro
Thr	Glu	Cys	Trp 100	Trp	Glu	Glu	Ile	Asn 105	Arg	Ala	Gly	Met	Glu 110	Trp	Tyr
Gln	Thr	Cys 115	Ser	Asn	Asn	Gly	Leu 120	Val	Ala	Gly	Phe	Gln 125	Ser	Arg	Tyr
	Glu .130	Ser	Val	Leu	Asp	Arg 135	Glu	Trp	Gln	Phe	Tyr 140	Суз	Суз	Arg	Tyr
Ser 145	Lys	Arg	Cys	Pro	Tyr 150	Ser	Суз	Trp	Leu	Thr 155	Thr	Glu	Tyr	Pro	Gly 160
His	Tyr	Gly	Glu	Glu 165	Met	Asp	Met	Ile	Ser 170	Tyr	Asn	Tyr	Asp	Tyr 175	Tyr
Ile	Arg	Gly	Ala 180	Thr	Thr	Thr	Phe	Ser 185	Ala	Val	Glu	Arg	Asp 190	Arg	Gln
Trp	Lys	Phe 195	Ile	Met	Cys	Arg	Met 200	Thr	Glu	Tyr	Asp	Сув 205	Glu	Phe	Ala
Asn	Val 210														
<211 <212)> 1; l> 14 ?> Pf B> Ho	11 RT	sapie	ens											
<400)> 13	186													
Arg 1	Ala	Ile	Tyr	Phe 5	Leu	Arg	Val	His	Arg 10	Leu	Trp	Ser	Ser	Ile 15	Ser
Leu	Leu	Phe	Phe 20	Pro	Ser	Ala	Lys	Met 25	Ala	Leu	Glu	Thr	Val 30	Pro	Lys
Asp	Leu	Arg 35	His	Leu	Arg	Ala	Cys 40	Leu	Leu	Cys	Ser	Leu 45	Val	Lys	Thr
Ile	Asp 50	Gln	Phe	Glu	Tyr	Asp 55	Gly	Cys	Asp	Asn	Cys	Asp	Ala	Tyr	Leu
Gln 65	Met	Lys	Gly	Asn	Arg 70	Glu	Met	Val	Tyr	Asp 75	-	Thr	Ser	Ser	Ser 80

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1203

Phe Asp Gly Ile Ile Ala Met Met Ser Pro Glu Asp Ser Trp Val Ser 85 90 95

Lys Trp Gln Arg Val Ser Asn Phe Lys Pro Gly Val Tyr Ala Val Ser 100 105 110

Val Thr Gly Arg Leu Pro Gln Gly Ile Val Arg Glu Leu Lys Ser Arg 115 120 125

Gly Val Ala Tyr Lys Ser Arg Asp Thr Ala Ile Lys Thr 130 135 140

<210> 1187

<211> 76

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (42)

<223> Xaa equals any of the naturally occurring L-amino acids

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Val His Arg Arg Leu Gly Ser Ile Val Arg Met Ala Ile Arg Glu Tyr
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Lys Xaa Gly Phe Ser Lys Gly Leu Gly Xaa Asp Ser 65 70 75

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	Ser	Thr	Arg	g Ser 20	Gln	Asn	Pro	His	Gly 25		Lys	Gln	Ile	Gly 30		Asp
	Gln	Ile	Trp 35		Asp	Leu	Arg	Ala 40		Ile	Gln	Gln	Val		Thr	Arg
	Gln	Ser 50		. Ala	Lys	Ser	Arg 55		Met	Glu	Leu	Tyr 60		His	Val	Tyr
	Asn 65		Cys	Thr	Ser	Val 70	His	Gln	Ser	Asn	Gln 75		Arg	Gly	Ala	Gly 80
	Val	Pro	Pro	Ser	Lys 85	Ser	Lys	Lys	Gly	Gln 90		Pro	Gly	Gly	Ala 95	Gln
	Phe	Val	Gly	Leu 100	Glu	Leu	Tyr	Lys	Arg 105	Leu	Lys	Glu	Phe	Leu 110	Lys	Asn
	Tyr	Leu	Thr 115		Leu	Leu	Lys	Asp 120	Gly	Glu	Asp	Leu	Met 125	Asp	Glu	Ser
	Val	Leu 130	Lys	Phe	Tyr	Thr	Gln 135	Gln	Trp	Glu	Asp	Tyr 140	Arg	Phe	Ser	Ser
	Lys 145	Val	Leu	Asn	Gly	Ile 150	Суз	Ala	Tyr	Leu	Asn 155	Arg	His	Trp	Val	Arg 160
	Arg	Glu	Cys	Asp	Glu 165	Gly	Arg	Lys	Gly	Ile 170	Tyr	Glu	Ile	туг	Ser 175	Leu
	Ala	Leu	Val	Thr 180	Trp	Arg	Asp	Cys	Leu 185	Phe	Arg	Pro	Leu	Asn 190	Lys	Gln
	Val	Thr	Asn 195	Ala	Val	Leu	Lys	Leu 200	Ile	Glu	Lys	Glu	Arg 205	Asn	Gly	Glu
•	Thr	Ile 210	Asn	Thr	Arg	Leu	Ile 215	Ser	Gly	Val	Val	Gln 220	Ser	Tyr	Val	Glu
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Phe	Tyr	Thr	Arg 260	Glu	Ser	Thr	Glu	Phe 265	Leu	Gln	Gln	Asn	Pro 270	Val	Thr
Glu	Tyr	Met 275	Lys	Lys	Ala	Glu	Ala 280	Arg	Leu	Leu	Glu	Glu 285	Gln	Arg	Arg
Val	Gln 290	Val	Туг	Leu	His	Glu 295	Ser	Thr	Gln	Asp	Glu 300	Leu	Ala	Arg	Lys
Cys 305	Glu	Gln	Val	Leu	11e 310	Glu	Lys	His	Leu	Glu 315	Ile	Phe	His	Thr	Glu 320
Phe	Gln	Asn	Leu	Leu 325	Asp	Ala	Asp	Lys	Asn 330	Glu	Asp	Leu	Gly	Arg 335	Met
Tyr	Asn	Leu	Val 340	Ser	Arg	Ile	Gln	Asp 345	Gly	Leu	Gly	Glu	Leu 350	Lys	Lys
Leu	Leu	G1u 355	Thr	His	Ile	His	Asn 360	Gln	Gly	Leu	Ala	Ala 365	Ile	Glu	Lys
Cys	Gly 370	Glu	Ala	Ala	Leu	Asn 375	Asp	Pro	Lys	Met	Tyr 380	Val	Gln	Thr	Val
Leu 385	Asp	Val	His	Lys	Lys 390	Tyr	Asn	Ala	Leu	Val 395	Met	Ser	Ala	Phe	Asn 400
Asn	Asp	Ala	Gly	Phe 405	.Val	Ala	Ala	Leu	Asp 410	Lys	Ala	Cys	Gly	Arg 415	Phe
Ile	Asn	Asn	Asn 420	Ala	Val	Thr	Lys	Met 425	Ala	Gln	Ser	Ser	Ser 430	Lys	Ser
Pro	Glu	Leu 435	Leu	Ala	Arg	Tyr	Cys 440	Asp	Ser	Leu	Leu	Lys 445	Lys	Ser	Ser
Lys	Asn 450	Pro	Glu	Glu	Ala	Glu 455	Leu	Glu	Asp	Thr	Leu 460	Asn	Gln	Val	Met
Val 465	Val	Phe	Lys	Tyr	Ile 470	Glu	Asp	Lys	Asp	Val 475	Phe	Gln	Lys	Phe	Туг 480
Ala	Lys	Met	Leu	Ala 485	Lys	Arg	Leu	Val	His 490	Gln	Asn	Ser	Ala	Ser 495	Asp
Asp	Ala	Glu	Ala	Ser	Met	Ile	Ser	Lys	Leu	Lys	Gln	Ala	Cys	Gly	Phe

WO 00/55350 PCT/US00/05882

1206

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-22.	J- 10	aa c	quar	5 all	y OL	cire	macı	urar.	ry o	ccur.	Ling	n-ai	11.110	uci	33
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-101	0> 1:	100													
			a	•	~ 3	a	•				T	•	3	3	-1
	ser	TYL	cys	Asp	GIU	ser	Arg	Leu		Asn	ren	Leu	Arg	_	11
1				5					10					15	
Thr	Arg	Glu	Xaa	Asp	Arg	Asp	Xaa	Arg	Leu	Xaa	Thr	Val	Lys	Gln	Le
			20					25					30		
T	C1.,	Dho	T10	C1 n	C1 5	D=0	Cl.	700	T ***	Leu	t/a l	TAU	Wa I	Tue	G1
Lys	GIU		116	GIII	GTII	PIO		ASII	гуз	ren	val		val	Буз	GI.
		35		٠			40					45			
Leu	Asp	Ile	Leu	Ala	Ala	Xaa	His	Asp	Val	Leu	Asn	Glu	Ser	Ser	Ly
	50					55					60				
C est	Tan	Gln.	G3.11	Ton	720	Cln	Cl.	Cl.	712	Cuc	Cue	Leu	Glw	Tan	T o
	rea	GIII	GIU	Ten	_	GIII	GIU	GIY	AId	Cys	Cys	Leu	GLY	Leu	_
65					70					75					8
Cys	Ala	Ser	Leu	Ser	Tyr	Glu	Ala	Glu	Lys	Ile	Phe	Lys	Trp	Ile	Ph
				85					90					95	
Ser	Tue	Dha	Car	co-	505	717	T 175	200	Gl.	Val	T.vo	Lou	Leu	Tur	T.O
JEL	БХЭ	riic		SCI	Ser	ALG	пур	-	GIU	Val	цуз	Leu		- 7 -	De
			100					105					110		
Cys	Ala	Thr	Tyr	Lys	Ala	Leu	Glu	Thr	Val	Gly	Glu	Lys	Lys	Ala	Ph
		115					120					125			
car	Sar	tta 1	Mot	Gl n	T 011	Wa 1	Wot	mh.~	502	Lou	Gla	Sor	Tla	Tan	Gli
SET		val	Mec	GIII	Leu		met	THE	ser	Leu		Ser	TTE	Leu	GI
	130					135					140				
Asn	Val	Asp	Thr	Pro	Glu	Leu	Leu	Cys	Lys	Cys	Val	Lys	Cys	Ile	Le
145					150					155					16
														٠	
	1707	A 1 -	7-~	C	m	Dwa	1116	T1.	Dho	605	V	N c n	Dho	7~~	7.0
Leu	Val	Ala	Arg	-	TYL	Pro	HIS	TTE		Ser	Add	ASII	PHE		AS
				165					170					175	
Chr	Val	Asp	Ile	Leu	Val	Gly	Trp	His	Arg	Asp	His	Thr	Gln	Lys	Pr
		_	180			-	•	185	_	_			190	-	
	T 6	mb	C1-	~1 -	17- 3	C	C1	Mare	T	C1 -	e	T 0	c1	D=-	n-
er	ren		GID	GIN	vaı	ser	_	rrp	ren	Gln	ser		GIU	PIO	PD(
		195					200					205			

Trp Val Ala Asp Leu Ala Phe Pro Thr Thr Leu Leu Gly Gln Phe Leu 210 215 220

Glu Asp Met Glu Ala Tyr Ala Glu Asp Leu Ser His Val Ala Ser Gly 225 230 235 240

Glu Ser Val Asp Glu Asp Val Pro Pro Pro Ser Val Ser Xaa Pro Lys 245 250 255

Leu Ala Ala Leu Leu Arg Val Phe Ser Thr Val Val Arg Ser Xaa Gly 260 265 270

Glu Xaa Xaa Ser Pro Ile Arg Xaa Leu Gln Leu Leu Arg His Thr
275 280 285

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<211> 100

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<213> Homo sapiens

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Ser Ser Asn Ala Leu Ala Tyr Leu His Ser Ser Ser Arg Pro Lys Arg 35 40 45

Pro Ala Trp Trp His Ser Val Pro Ala Arg Pro Leu Arg Gly Pro Arg 50 55 60

Thr Ala Met Ala Pro Thr Gly Val Ser Ala Cys Arg Arg Gln Lys Trp
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Ala Pro His Ser Glu Gly Ala Ala Ala Val Gln Pro Gln Val Ala Leu 85 90 95

Ala Pro Gly Leu 100

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WO 00/55350 PCT/US00/05882

1209

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Ala	Gly 50	Leu	Phe	Ser	Leu	Ser 55	Gln	Ala	Gln	Tyr	Glu 60	Asp	Asp	Pro	His
Trp 65	Trp	Phe	His	Tyr	Leu 70	Arg	Ser	Gln	Gln	Ser 75	Thr	Tyr	Tyr	Asp	Pro 80
Tyr	Asp	Pro	Tyr	Pro 85	Tyr	Glu	Thr	туг	Glu 90	Pro	Tyr	Pro	Tyr	Gly 95	Val
Asp	Glu	Gly	Pro 100	Ala	Tyr	Thr	Tyr	Gly 105	Ser	Pro	Ser	Pro	Pro 110	Asp	Pro
Arg	Asp	Cys 115	Pro	Gln	Glu	Cys	Asp 120	Суз	Pro	Pro	Asn	Phe 125	Pro	Thr	Ala
Met	Tyr 130	Cys	Asp	Asn	Arg	Asn 135	Leu	Lys	Tyr	Leu	Pro 140	Phe	Val	Pro	Ser
Arg 145	Met	Lys	Tyr	Val	Tyr 150	Phe	Gln	Asn	Asn	Gln 155	Ile	Thr	Ser	Ile	Gln 160
Glu	Gly	Val	Phe	Asp 165	Asn	Ala	Thr	Gly	Leu 170	Leu	Trp	Ile	Ala	Leu 175	His
Gly	Asn	Gln	Ile 180	Thr	Ser	Asp	Lys	Val 185	Gly	Arg	Lys	Val	Phe 190	Ser	Lys
Leu	Arg	His 195	Leu	Glu	Arg	Leu	Tyr 200	Leu	Asp	His	Asn	Asn 205	Leu	Thr	Arg
Met	Pro 210	Gly	Pro	Leu	Pro	Arg 215	Ser	Leu	Arg	Glu	Leu 220	His	Leu	Asp	His
Asn 225	Gln	Ile	Ser	Arg	Val 230	Pro	Asn	Asn	Ala	Leu 235	Glu	Gly	Leu	Glu	Asn 240
Leu	Thr	Ala	Leu	Туг 245	Leu	Gln	His	Asn	Glu 250	Ile	Gln	Glu	Val	Gly 255	Ser
Ser	Met	Arg	Gly 260	Leu	Arg	Ser	Leu	11e 265	Leu	Leu	Asp	Leu	Ser 270	Tyr	Asn
His	Leu	Arg 275	Lys	Val	Pro	Asp	Gly 280	Leu	Pro	Ser	Ala	Leu 285	Glu	Gln	Leu
Tyr	Met 290	Glu	His	Asn	Asn	Val 295	Tyr	Thr	Val	Pro	Asp 300	Ser	Tyr	Phe	Arg
Gly 305	Ala	Pro	Lys	Leu	Leu 310	Tyr	Val	Arg	Leu	Ser 315	His	Asn	Ser	Leu	Thr 320

Asn Asn Gly Leu Ala Ser Asn Thr Phe Asn Ser Ser Ser Leu Leu Glu 325 330 Leu Asp Leu Ser Tyr Asn Gln Leu Gln Lys Ile Pro Pro Val Asn Thr 345 Asn Leu Glu Asn Leu Tyr Leu Gln Gly Asn Arg Ile Asn Glu Phe Ser 360 Ile Ser Ser Phe Cys Thr Val Val Asp Val Val Asn Phe Ser Lys Leu 375 Gln Val Leu Arg Leu Asp Gly Asn Glu Ile Lys Arg Ser Ala Met Pro 385 390 395 Ala Asp Ala Pro Leu Cys Leu Arg Leu Ala Ser Leu Ile Glu Ile <210> 1193 <211> 620 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (375) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (501) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (532) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (546) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1193 Ser Ala Val Thr Ala Phe Ser Glu Gly Ser Val Ile Ala Tyr Tyr Trp Ser Glu Phe Ser Ile Pro Gln His Leu Val Glu Glu Ala Glu Arg Val

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Lys	Ser 50	Phe	Val	Val	Thr	Ser 55	Val	Val	Ala	Phe	Pro 60	Thr	Asp	Ser	Lys
Thr 65	Val	Gln	Arg	Thr	Gln 70	Asp	Asn	Ser	Cys	Ser 75	Phe	Gly	Leu	His	Ala 80
Arg	Gly	Val	Glu	Leu 85	Met	Arg	Phe	Thr	Thr 90	Pro	Gly	Phe	Pro	Asp 95	Ser
Pro	Tyr	Pro	Ala 100	His	Ala	Arg	Cys	Gln 105	Trp	Ala	Leu	Arg	Gly 110	Asp	Ala
Asp	Ser	Val 115	Leu	Ser	Leu	Thr	Phe 120	Arg	Ser	Phe	Asp	Leu 125	Ala	Ser	Cys
Asp	Glu 130	Arg	Gly	Ser	Asp	Leu 135	Val	Thr	Val	Tyr	Asn 140	Thr	Leu	Ser	Pro
Met 145	Glu	Pro	His	Ala	Leu 150	Val	Gln	Leu	Суз	Gly 155	Thr	Tyr	Pro	Pro	Ser 160
Tyr	Asn	Leu	Thr	Phe 165	His	Ser	Ser	Gln	Asn 170	Val	Leu	Leu	Ile	Thr 175	Leu
Ile	Thr	Asn	Thr 180	Glu	Arg	Arg	His	Pro 185	Gly	Phe	Glu	Ala	Thr 190	Phe	Phe
Gln	Leu	Pro 195	Arg	Met	Ser	Ser	Cys 200	Gly	Gly	Arg	Leu	Arg 205	Lys	Ala	Gln
Gly	Thr 210	Phe	Asn	Ser	Pro ·	Туг 215	туг	Pro	Gly	His	Tyr 220	Pro	Pro	Asn	Ile
Asp 225	Cys	Thr	Trp	Asn	Ile 230	Glu	Val	Pro	Asn	Asn 235	Gln	His	Val	Lys	Val 240
Arg	Phe	Lys	Phe	Phe 245	Tyr	Leu	Leu	Glu	Pro 250	Gly	Val	Pro	Ala	Gly 255	Thr
Cys	Pro	Lys	Asp 260	Tyr	Val	Glu	Ile	Asn 265	Gly	Glu	Lys	Tyr	Cys 270	Gly	Glu
Arg	Ser	Gln 275	Phe	Val	Val	Thr	Ser 280	Asn	Ser	Asn	Lys	Ile 285	Thr	Val	Arg
Phe	His	Ser	Asp	Gln	Ser	Tyr	Thr	Asp	Thr	Gly	Phe	Leu	Ala	Glu	Tyr

	290					295					300				
Leu 305	Ser	Tyr	Asp	Ser	Ser 310	Asp	Pro	Суз	Pro	Gly 315	Gln	Phe	Thr	Cys	Arg 320
Thr	Gly	Arg	Суз	Ile 325	Arg	Lys	Glu	Leu	Arg 330	Cys	Asp	Gly	Trp	Ala 335	Asp
Cys	Thr	Asp	His 340	Ser	Asp	Glu	Leu	Asn 345	Cys	Ser	Суѕ	Asp	Ala 350	Gly	His
Gln	Phe	Thr 355	Cys	Lys	Asn	Lys	Phe 360	Суз	Lys	Pro	Leu	Phe 365	Trp	Val	Суз
Asp	Ser 370	Val	Asn	Asp	Суз	Xaa 375	Asp	Asn	Ser	Asp	Glu 380	Gln	Gly	Cys	Ser
Cys 385	Pro	Ala	Gln	Thr	Phe 390	Arg	Cys	Ser	Asn	Gly 395	Lys	Суз	Leu	Ser	Lys 400
Ser	Gln	Gln	Cys	Asn 405	Gly	Lys	Asp	Asp	Cys 410	Gly	Asp	Gly	Ser	Asp 415	Glu
Ala	Ser	Cys	Pro 420	Lys	Val	Asn	Val	Val 425	Thr	Cys	Thr	Lys	His 430	Thr	Tyr
Arg	Cys	Leu 435	Asn	Gly	Leu	Cys	Leu 440	Ser	Lys	Gly	Asn	Pro 445	Glu	Cys	Asp
Gly	Lys 450	Glu	Asp	Cys	Ser	Asp 455	Gly	Ser	Asp	Glu	Lys 460	Asp	Cys	Asp	Суз
Gly 465	Leu	Arg	Ser	Phe	Thr 470	Arg	Gln	Ala	Arg	Val 475	Val	Gly	Gly	Thr	Asp 480
Ala	Asp	Glu	Gly	Glu 485	Trp	Pro	Trp	Gln	Val 490	Ser	Leu	His	Ala	Leu 495	Gly
Gln	Gly	Thr	Ser 500	Xaa	Gly	Ala	Ser	Leu 505	Ile	Ser	Pro	Asn	Trp 510	Leu	Val
Ser	Ala	Ala 515	His	Cys	Tyr	Ile	Asp 520	Asp	Arg	Gly	Phe	Arg 525	Tyr	Ser	Asp
Pro	Thr 530	Gln	Xaa	Thr	Ala	Phe 535	Leu	Gly	Leu	His	Asp 540	Gln	Ser	Gln	Arg
Ser 545	Xaa	Leu	Gly	Cys	Arg 550	Ser	Ala	Gly	Ser	Ser 555	Ala	Ser	Ser	Pro	Thr 560
Pro	Ser	Ser	Met	ጥከተ	Ser	Pro	Ser	ጥኮዮ	Met	ጥኮኖ	Ser	Ara	Cva	Tro	Ser

570 575 565 Trp Arg Asn Arg Gln Ser Thr Ala Pro Trp Cys Gly Pro Ser Ala Cys 585 580 Arg Thr Pro Pro Met Ser Ser Leu Pro Ala Arg Pro Ser Gly Ser Arg 600 Ala Gly Asp Thr Pro Ser Met Glu Ala Leu Ala Arg 615 <210> 1194 <211> 51 <212> PRT <213> Homo sapiens <400> 1194 Arg Thr Leu Cys His Leu Thr Thr Leu Asp Glu Leu Ser Cys Gln Arg Glu Asn Leu Met Phe Lys Glu His Phe Pro Leu Ala Asp Val Thr Ala Gly Phe Val Phe His Met Cys Phe Ser Tyr Thr His Leu Asn Ala Phe 40 Lys His Leu 50 <210> 1195 <211> 269 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (245) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE

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- Phe Phe Pro Glu Leu Tyr Phe Asn Val Asp Asn Gly Tyr Leu Glu Gly 35 40
- Leu Val Arg Gly Leu Lys Ala Gly Val Leu Ser Gln Ala Asp Tyr Leu
 50 60
- Asn Leu Val Gln Cys Glu Thr Leu Glu Asp Leu Lys Leu His Leu Gln 65 70 75 80
- Ser Thr Asp Tyr Gly Asn Phe Leu Ala Asn Glu Ala Ser Pro Leu Thr 85 90 95
- Val Ser Val Ile Asp Asp Arg Leu Lys Glu Lys Met Val Val Glu Phe
 100 105 110
- Arg His Met Arg Asn His Ala Tyr Glu Pro Leu Ala Ser Phe Leu Asp 115 120 125
- Phe Ile Thr Tyr Ser Tyr Met Ile Asp Asn Val Ile Leu Leu Ile Thr 130 140
- Gly Thr Leu His Gln Arg Ser Ile Ala Glu Leu Val Pro Lys Cys His 145 150 155 160
- Pro Leu Gly Ser Phe Glu Gln Met Glu Ala Val Asn Ile Ala Gln Thr 165 170 175
- Pro Ala Glu Leu Tyr Asn Ala Ile Leu Val Asp Thr Pro Leu Ala Ala 180 185 190
- Phe Phe Gln Asp Cys Ile Ser Glu Gln Asp Leu Asp Glu Met Asn Ile 195 200 205
- Glu Ile Ile Arg Asn Thr Leu Tyr Lys Ala Tyr Leu Glu Ser Phe Tyr 210 215 220
- Lys Phe Cys Thr Leu Leu Gly Gly Thr Thr Ala Asp Ala Met Cys Pro

225 230 235 240 Ile Leu Glu Phe Xaa Xaa Gln Thr Val Pro Ser Ser Phe His Thr Val 250 245 Xaa Gly Ser Thr Leu Arg Ala Trp Arg Xaa Gly Ser Gly 265 <210> 1196 <211> 301 <212> PRT <213> Homo sapiens <400> 1196 Arg His Glu Pro Ala Pro Arg Glu Ala Pro Gly Ser Arg Ala Ser Ala Phe Leu Pro Ser Phe Leu Pro Gly Pro Arg Leu Val Pro Ala Gly His Pro Thr Ala Thr Met Phe Val Pro Cys Gly Glu Ser Ala Pro Asp Leu Ala Gly Phe Thr Leu Leu Met Pro Ala Val Ser Val Gly Asn Val Gly Gln Leu Ala Met Asp Leu Ile Ile Ser Thr Leu Asn Met Ser Lys Ile Gly Tyr Phe Tyr Thr Asp Cys Leu Val Pro Met Val Gly Asn Asn Pro Tyr Ala Thr Thr Glu Gly Asn Ser Thr Glu Leu Ser Ile Asn Ala Glu Val Tyr Ser Leu Pro Ser Arg Lys Leu Val Ala Leu Gln Leu Arg 120 Ser Ile Phe Ile Lys Tyr Lys Ser Lys Pro Phe Cys Glu Lys Leu Leu 135 140 Ser Trp Val Lys Ser Ser Gly Cys Ala Arg Val Ile Val Leu Ser Ser 145 150 Ser His Ser Tyr Gln Arg Asn Asp Leu Gln Leu Arg Ser Thr Pro Phe 165 170 Arg Tyr Leu Leu Thr Pro Ser Met Gln Lys Ser Val Gln Asn Lys Ile

Lys Ser Leu Asn Trp Glu Glu Met Glu Lys Ser Arg Cys Ile Pro Glu 200 Ile Asp Asp Ser Glu Phe Cys Ile Arg Ile Pro Gly Gly Gly Ile Thr 215 Lys Thr Leu Tyr Asp Glu Ser Cys Ser Lys Glu Ile Gln Met Ala Val 230 Leu Leu Lys Phe Val Ser Glu Gly Asp Asn Ile Pro Asp Ala Leu Gly 245 Leu Val Glu Tyr Leu Asn Glu Trp Leu Gln Ile Leu Lys Pro Leu Ser 265 Asp Asp Pro Thr Val Ser Ala Ser Arg Trp Lys Ile Pro Ser Ser Trp 280 Arg Leu Leu Phe Gly Ser Gly Leu Pro Pro Ala Leu Phe 295 <210> 1197 <211> 246 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (49) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (65) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (230) ' <223> Xaa equals any of the naturally occurring L-amino acids <400> 1197 Gly Thr Arg Asp Leu Leu Leu Ala Ala Ala Ala Thr Gly Lys Leu 1 5 10 15

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25

Gly Ser Glu Glu Ser Thr Lys Pro Ala Ser Val Arg Ala Leu Leu Phe 45

Xaa Ile Ser Phe Leu Met Leu Cys His Val Ala Gln Thr Tyr Gly Ser 55

Xaa Val Ile Leu Ser Glu Ser Arg Thr Gly Ala Glu Val Pro Phe 80

Glu Thr Trp Met Gln Thr Cys Met Pro Glu Glu Glu Gly Lys Ile Leu Asn 95

Pro Asp His Pro Cys Phe Arg Pro Asp Ser Thr Lys Val Glu Ser Leu 100

Val Ala Leu Leu Asn Asn Ser Ser Glu Met Lys Leu Val Gln Met Lys 115 120 125

Trp His Glu Ala Cys Leu Ser Ile Ser Ala Ala Ile Leu Glu Ile Leu 130 135 140

Thr Asp Asn Ile Lys Gly Lys Val Cys Ser Leu Ala Val Cys Ala Val 165 170 175

Ala Trp Leu Val Ala His Val Arg Met Leu Gly Leu Asp Glu Arg Glu 180 185 190

Lys Ser Leu Gln Met Ile Arg Gln Leu Ala Gly Pro Leu Phe Ser Glu 195 200 205

Asn Thr Leu Gln Phe Tyr Asn Glu Arg Val Val Ile Met Asn Ser Ile 210 215 220

Leu Gly Ala His Val Xaa Arg Arg Ala Ala Ala Asp Ser His Ala Gly 225 230 235 240

Phe Lys Phe Pro Ser Asn 245

<210> 1198

<211> 465

<212> PRT

<213> Homo sapiens

<220>

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Lys	Asn	Met	Glu	Thr	Glu	Gln	Pro	Glu	Glu	Thr	Phe	Pro	Asn	Thr	Glu
1				5					10					15	
Thr	Asn	Gly	Glu 20		Gly	Lys	Arg			Glu	Asp	Met		Glu	Glu
			20					25		•			30		
Gln	Ala	Phe	Lys	Arq	Ser	Arq	Asn	Thr	Asp	Glu	Met	Val	Glu	Leu	Ara
		35		,			40					45			9
Ile	Leu	Leu	Gln	Ser	Lys	Asn	Ala	Gly	Ala	Val	Ile	Gly	Lys	Gly	Gly
	50					55					60				_
Lys	Asn	Ile	Lys	Ala	Leu	Arg	Thr	Asp	Tyr	Asn	Ala	Ser	Val	Ser	Val
65					70					75					80
Pro	Asp	Ser	Ser		Pro	Glu	Arg	Ile		Ser	Ile	Ser	Ala	Asp	Ile
				85					90					95	
C1	mh	71.	G3	63.	71.	•	•		-1-	_,		_,	_		
GIU	THE	11e	100	GIU	TTE	Leu	rys		116	116	Pro	Thr		Glu	GIu
			100					105					110		
Glv	T.en	Gln	T.e.u	Pro	Ser	Pro	Thr	A1 =	መከተ	Sar	Gl n	Tou	Pro	Leu	C1
1	200	115	204	110	JCI	110	120	ALG	1111	Der	GIII	125	PLO	Deu	GIU
												123			
Ser	Asp	Ala	Val	Glu	Cys	Leu	Asn	Tvr	Gln	His	Tvr	Lvs	Glv	Ser	Asp
	130				•	135		-2-			140	-1-	V-1		
Phe	Asp	Cys	Glu	Leu	Arg	Leu	Leu	Ile	His	Gln	Ser	Leu	Ala	Gly	Gly
145		-			150					155				-	160
Ile	Ile	Gly	Val	Lys	Gly	Ala	Lys	Ile	Lys	Glu	Leu	Arg	Glu	Asn	Thr
				165					170					175	
Gln	Thr	Thr		Lys	Leu	Phe	Gln	Glu	Cys	Cys	Pro	His	Ser	Thr	Asp
			180					185					190		
			_												
Arg	val	val	Leu	Ile	Gly	Gly	Lys	Pro	Asp	Xaa	Val	Val	Glu	Cys	Ile

		195					200					205			
Lys	Ile 210	Ile	Leu	Asp	Leu	1le 215	Ser	Glu	Ser	Pro	Ile 220	Lys	Gly	Arg	Ala
Gln 225	Pro	Tyr	Asp	Pro	Asn 230	Phe	Tyr	Asp	Glu	Thr 235	Tyr	Asp	Tyr	Gly	Gly 240
Phe	Thr	Met	Met	Phe 245	Asp	Asp	Arg	Arg	Gly 250	Arg	Pro	Val	Gly	Phe 255	Pro
Met	Arg	Gly	Arg 260	Gly	Gly	Phe	Asp	Arg 265	Met	Pro	Pro	Gly	Arg 270	Gly	Gly
Arg	Pro	Met 275	Pro	Pro	Ser	Arg	Arg 280	Asp	Tyr	Asp	Asp	Met 285	Ser	Pro	Arg
Arg	Gly 290	Pro	Pro	Pro	Pro	Pro 295	Pro	Gly	Arg	Gly	Gly 300	Arg	Gly	Gly	Ser
Arg 305	Ala	Arg	Asn	Leu	Pro 310	Leu	Pro	Pro	Pro	Pro 315	Pro	Pro	Arg	Gly	Gly 320
Asp	Leu	Met	Ala	Tyr 325	Asp	Arg	Arg	Gly	Arg 330	Pro	Gly	Asp	Arg	Туг 335	Asp
Gly	Met	Val	Gly 340	Phe	Ser	Ala	Asp	Glu 345	Thr	Trp	Asp	Ser	Ala 350	Ile	Asp
Thr	Trp	Ser 355	Pro	Ser	Glu	Trp	Gln 360	Met	Ala	Tyr	Glu	Pro 365	Gln	Gly	Gly
Ser	Gly 370	туr	Asp	Tyr	Ser	Tyr 375	Ala	Gly	Gly	Arg	Gly 380	Ser	Tyr	Gly	Asp
Leu 385	Gly	Gly	Pro	Ile	Ile 390	Thr	Thr	Gln	Val	Thr 395	Ile	Pro	Lys	Asp	Leu 400
Ala	Gly	Ser	Ile	Ile 405	Gly	Lys	Gly	Gly	Gln 410	Arg	Ile	Lys	Gln	Ile 415	Arg
His	Glu	Ser	Gly 420	Ala	Ser	Ile	Lys	Ile 425	Asp	Glu	Pro	Leu	Glu 430	Gly	Ser
Glu	Asp	Arg 435	Ile	Ile	Thr	Ile	Thr 440	Gly	Thr	Gln	Asp	Gln 445	Ile	Gln	Asn
Ala	Gln 450	Tyr	Leu	Leu	Gln	Asn 455	Ser	Val	Ser	Ser	Xaa 460	Xaa	Leu	Ala	Leu

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<210> 1199
<211> 446
<212> PRT
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Tyr Pro Ala Ala Cys Xaa Thr Gly Pro Glu Phe Pro Gly Arg Pro Thr
Arg Pro His Glu Met Asp Gln Tyr Trp Gly Ile Gly Ser Leu Ala Ser
             20
                                 25
Gly Ile Asn Leu Phe Thr Asn Ser Phe Glu Gly Pro Val Leu Asp His
                             40
Arg Tyr Tyr Ala Gly Gly Cys Ser Pro His Tyr Ile Leu Asn Thr Arg
                         55
Phe Arg Lys Pro Tyr Asn Val Glu Ser Tyr Thr Pro Gln Thr Gln Gly
Lys Tyr Glu Phe Ile Leu Xaa Xaa Tyr Glu Ser Tyr Ser Asp Phe Glu
Arg Asn Val Thr Glu Lys Met Ala Ser Lys Ser Gly Phe Ser Phe Gly
            100
                              105
Phe Lys Ile Pro Gly Ile Phe Glu Leu Gly Ile Ser Ser Gln Ser Asp
                            120
Arg Gly Lys His Tyr Ile Arg Arg Thr Lys Arg Phe Ser His Thr Lys
                        135
                                           140
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Ser 145	Val	Phe	Leu	His	Ala 150	Arg	Ser	Asp	Leu	Glu 155	Val	Ala	His	Tyr	Lys 160
Leu	Lys	Pro	Arg	Ser 165	Leu	Met	Leu	His	Tyr 170	Glu	Phe	Leu	Gln	Arg 175	Val
Lys	Arg	Leu	Pro 180	Leu	Glu	Tyr	Ser	Туг 185	Gly	Glu	Tyr	Arg	Asp 190	Leu	Phe
Arg	Asp	Phe 195	Gly	Thr	His	Tyr	Ile 200	Thr	Glu	Ala	Val	Leu 205	Gly	Gly	Ile
Tyr	Glu 210	Tyr	Thr	Leu	Val	Met 215	Asn	Lys	Glu	Ala	Met 220	Glu	Arg	Gly	Asp
225				Asn	230					235					240
	•			Glu 245					250					255	
			260	Ile				265					270		
		275		Asp			280					285			
	290			Leu		295					300		_		
305				Asp	310					315				_	320
				125					330					335	_
			340	Arg				345					350		
		355		Ser	_		360			-		365		-	
	370			Gly		375					380				
385				Cys	390					395					400
эTÀ	тÀз	Trp	Asn	Cys 405	Trp	Ser	Asn	Trp	Ser 410	ser	Cys	ser	Gly	Arg 415	Arg

Lys Thr Arg Gln Arg Gln Cys Asn Asn Pro Pro Pro Gln Asn Gly Gly
420 425 430

Ser Pro Cys Ser Gly Pro Ala Ser Glu Thr Leu Asp Cys Ser 435 440 445

<210> 1200

<211> 437

<212> PRT

<213> Homo sapiens

<400> 1200

Leu Gly Ser Ser Asp Ser Tyr Ala Ser Pro Gly Arg Ala Ala Pro
1 5 10 15

Pro Ala Ala Ala Gly Pro Gly Asp Thr Ser Ala Cys Tyr Lys Ser Ser 20 25 30

Gly Pro Arg Cys Leu Leu Pro Asp Leu Ala Pro Ser Ser Glu Pro Gly 35 40 45

Ala Cys Leu Gly Gly Leu Ser Val Phe Thr Met Glu Gln Leu Ser Ser 50 55 60

Ala Asn Thr Arg Phe Ala Leu Asp Leu Phe Leu Ala Leu Ser Glu Asn 65 70 75 80

Asn Pro Ala Gly Asn Ile Phe Ile Ser Pro Phe Ser Ile Ser Ser Ala 85 90 95

Met Ala Met Val Phe Leu Gly Thr Arg Gly Asn Thr Ala Ala Gln Leu 100 105 110

Ser Lys Thr Phe His Phe Asn Thr Val Glu Glu Val His Ser Arg Phe 115 120 125

Gln Ser Leu Asn Ala Asp Ile Asn Lys Arg Gly Ala Ser Tyr Ile Leu 130 135 140

Lys Leu Ala Asn Arg Leu Tyr Gly Glu Lys Thr Tyr Asn Phe Leu Pro 145 150 155 160

Glu Phe Leu Val Ser Thr Gln Lys Thr Tyr Gly Ala Asp Leu Ala Ser 165 170 175

Val Asp Phe Gln His Ala Ser Glu Asp Ala Arg Lys Thr Ile Asn Gln 180 185 190

Trp	Val	Lys 195	Gly	Gln	Thr	Glu	Gly 200	Lys	Ile	Pro	Glu	Leu 205	Leu	Ala	Ser
Gly	Met 210	Val	Asp	Asn	Met	Thr 215	Lys	Leu	Val	Leu	Val 220	Asn	Ala	Ile	Tyr

Phe Lys Gly Asn Trp Lys Asp Lys Phe Met Lys Glu Ala Thr Thr Asn 225 230 230 240

Ala Pro Phe Arg Leu Asn Lys Lys Asp Arg Lys Thr Val Lys Met Met 245 250 255

Tyr Gln Lys Lys Phe Ala Tyr Gly Tyr Ile Glu Asp Leu Lys Cys 260 265 270

Arg Val Leu Glu Leu Pro Tyr Gln Gly Glu Glu Leu Ser Met Val Ile 275 280 285

Leu Leu Pro Asp Asp Ile Glu Asp Glu Ser Thr Gly Leu Lys Lys Ile 290 295 300

Glu Glu Gln Leu Thr Leu Glu Lys Leu His Glu Trp Thr Lys Pro Glu 305 310 315 320

Asn Leu Asp Phe Ile Glu Val Asn Val Ser Leu Pro Arg Phe Lys Leu 325 330 335

Glu Glu Ser Tyr Thr Leu Asn Ser Asp Leu Ala Arg Leu Gly Val Gln 340 345 350

Asp Leu Phe Asn Ser Ser Lys Ala Asp Leu Ser Gly Met Ser Gly Ala 355 360 365

Arg Asp Ile Phe Ile Ser Lys Ile Val His Lys Ser Phe Val Glu Val 370 375 380

Asn Glu Glu Gly Thr Glu Ala Ala Ala Ala Thr Ala Gly Ile Ala Thr 385 390 395 400

Phe Cys Met Leu Met Pro Glu Glu Asn Phe Thr Ala Asp His Pro Phe 405 410 415

Leu Phe Phe Ile Arg His Asn Ser Ser Gly Ser Ile Leu Phe Leu Gly 420 425 430

Arg Phe Ser Ser Pro 435

<211> 82 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (82) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1201 Gln Leu Gly Pro Val Val Gly Gly Trp Tyr Lys Val Leu Asp Arg Phe Ile Pro Gly Thr Thr Lys Val Asp Ala Leu Lys Lys Met Leu Leu Asp 25 Gln Gly Gly Phe Ala Pro Cys Phe Leu Gly Cys Phe Leu Pro Leu Val 40 Gly Ala Leu Asn Gly Leu Ser Ala Gln Asp Asn Trp Pro Asn Tyr Ser 55 Gly Ile Ile Leu Met Pro Leu Ser Pro Thr Thr Ile Tyr Gly Leu Leu Cys Xaa <210> 1202 <211> 126 <212> PRT <213> Homo sapiens <400> 1202 Ile Ser Arg Ser Ser Ala Arg Arg Gln Pro Phe Arg His Gly Arg Leu Trp Arg Ala Ala Met Ala Leu Arg Tyr Pro Met Ala Val Gly Leu 20 Asn Lys Gly His Lys Val Thr Lys Asn Val Ser Lys Pro Arg His Ser 40 Arg Arg Arg Gly Arg Leu Thr Lys His Thr Lys Phe Val Arg Asp Met Ile Arg Glu Val Cys Gly Phe Ala Pro Tyr Glu Arg Arg Ala Met Glu

70

75

Leu Leu Lys Val Ser Lys Asp Lys Arg Ala Leu Lys Phe Ile Lys Lys 85 90 95

Arg Val Gly Thr His Ile Arg Ala Lys Arg Lys Arg Glu Glu Leu Ser 100 105 110

Asn Val Leu Ala Ala Met Arg Lys Ala Ala Ala Lys Lys Asp 115 120 125

<210> 1203

<211> 130

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (27)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1203

Asp Trp Asn Pro Asp Leu Gln Ala Ser Ala Val Cys Ile Lys Arg Val 1 5 10 15

Gly Glu Ser Gly Pro Leu Ala Gln Glu Pro Xaa Leu Leu Lys Glu Gly
20 25 30

Phe Lys Ala Lys Trp Val Cys Gln Arg Cys Cys Leu Pro Phe Leu Glu 35 40 45

Met Leu Ile Ser Leu Ser Lys Thr Glu Lys Ser Arg Cys Tyr Arg Asn 50 55 60

Asn Leu Val Cys Cys Ile Asn Cys Ser Trp Ala Trp Ser Ser Ile Pro 65 70 75 80

Thr Leu Arg Phe Pro Ala Ser Leu Cys Cys Pro Gly Ser His Ser Cys 85 90 95

Arg Arg Pro Asn Pro Leu Ala Val Phe Cys Leu Lys Ile Trp Gly Ala 100 105 110

Pro Ser Leu Ser Ser Pro Gly Asn Ser Leu Ala Glu Gly Gly Asp Pro 115 120 125

Pro Gln

130

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<210> 1204
<211> 228
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<213> Homo sapiens
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<222> (189)
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<220>
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<222> (228)
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Trp Ala Ala Phe Glu Pro Ala Thr Leu Ala Trp Lys Phe Pro Phe Gln
Ser Gly Phe Cys Leu Leu Pro Ser Pro Ser Pro Arg Tyr Leu Phe
                                 25
Thr Ser His Leu Ile Ser Leu Cys Ser Ser Val Ser Pro Thr His Ile
                             40
Ile Gly Asp Ser Gly Gly Ser Leu Thr Ser Leu Leu Ser Asn Ala Arg
Pro Ser Gly Leu Ala Ser Val Ala Ser His Ile Asp Val Thr Leu Glu
 65
                     70
                                         75
Leu Leu Pro Gln Arg Gly Arg Arg Asp Arg Leu Ser Pro His Leu Pro
                 85
                                     90
Pro Tyr Ser Pro Leu Tyr Ser Arg Phe Asp His Leu Ser Pro Ser Ala
            100
                                105
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Ala Pro Ser His Phe Gly Gln Ser Gln Ala Pro Ile Arg Leu Pro Pro 120 Pro Pro Gly Ala Pro Ser Ile Ser Leu Ser Pro Leu Pro Gln Asn Leu 135 Cys Lys Gly Tyr Glu Arg Asp Pro Leu Pro Ser Arg Pro Pro Leu Arg 150 155 Ala Val Arg Ser Lys Lys Gln Lys Leu Val Gly Gly Trp Leu Gly Leu . 170 Cys Pro Val Pro Arg Trp Asp Lys Leu Ala Phe Ser Xaa Ile Pro Ser 180 185 Trp Val Pro Xaa Ser Phe Xaa Ala Pro Gly Ala Arg Thr His Cys Ala Val Phe Leu Phe Ser Phe Val Gly Lys Gly Thr Lys Val Phe Ala Lys Xaa Pro Val Xaa 225 <210> 1205 <211> 270 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (128) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1205 Leu Pro Gly Ala Val Ala Ala Ser Ser Gly Ser Pro Pro Gly Ser Ala Leu Ala Ala Val Ala Ser Gly Gly Asp Leu Phe Pro Gly Gln Pro Val 20 Ser Glu Leu Ile Ala Gln Leu Leu Arg Ala Glu Pro Tyr Pro Ala Ala Ala Gly Arg Phe Gly Ala Gly Gly Ala Ala Gly Ala Val Leu Gly

Ile Asp Asn Val Cys Glu Leu Ala Ala Arg Leu Leu Phe Ser Thr Val

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1229

65					70					75					80
Glu	Trp	Ala	Arg	His 85	Ala	Pro	Phe	Phe	Pro 90	Glu	Leu	Pro	Val	Ala 95	Asp
Gln	Val	Ala	Leu 100	Leu	Arg	Leu	Ser	Trp 105	Ser	Glu	Leu	Phe	Val 110	Leu	Asn
Ala	Ala	Gln 115	Ala	Ala	Leu	Pro	Leu 120	His	Thr	Ala	Pro	Leu 125	Leu	Ala	Xaa
Ala	Gly 130	Leu	His	Ala	Ala	Pro 135	Met	Ala	Ala	Glu	Arg 140	Ala	Val	Ala	Phe
Met 145	Asp	Gln	Val	Arg	Ala 150	Phe	Gln	Glu	Gln	Val 155	Asp	Lys	Leu	Gly	Arg 160
Leu	Gln	Val	Asp	Ser 165	Ala	Glu	Tyr	Gly	Cys 170	Leu	Lys	Ala	Ile	Ala 175	Leu
Phe	Thr	Pro	Asp 180	Ala	Cys	Gly	Leu	Ser 185	Asp	Pro	Ala	His	Val 190	Glu	Ser
Leu	Gln	Glu 195	Lys	Ala	Gln	Val	Ala 200	Leu	Thr	Glu	Tyr	Val 205	Arg	Ala	Gln
Tyr	Pro 210	Ser	Gln	Pro	Gln	Arg 215	Phe	Gly	Arg	Leu	Leu 220	Leu	Arg	Leu	Pro
Ala 225	Leu	Arg	Ala	Val	Pro 230	Ala	Ser	Leu	Ile	Ser 235	Gln	Leu	Phe	Phe	Met 240
Arg	Leu	Val	Gly	Lys 245	Thr	Pro	Ile	Glu	Thr 250	Leu	Ile	Arg	Asp	Met 255	Leu
Leu	Ser	Gly	Ser 260	Thr	Phe	Asn	Trp	Pro 265	Tyr	Gly	Ser	Gly	Gln 270		
<211 <212)> 12 l> 89 !> PF B> Ho) R T	apie	ens											
)> 12 Phe		Cys	Ser 5	Asp	Lys	Tyr	Phe	Thr 10	Phe	Phe	Ser	Val	His 15	Gln
Arg	Glu	Arg	Asp 20	Pro	Pro	Thr	Ala	Val 25	Thr	Ser	Lys	Cys	Ser 30	Cys	Ser

Ile Asn Gly Val Thr Asp Thr Glu Val His Ser Trp Phe Leu Ser Arg 35 40 45

Val Val Ile Leu Val Ser Trp Ser Leu Gly His Trp Gly Cys Thr Leu 50 55 60

Lys Ser Pro Asn Arg Leu Ala Ile Lys Ile Asn Lys Ala Ala Ala Pro 65 70 75 80

Phe Gln Phe Thr Phe His Leu Thr Gln 85

<210> 1207

<211> 145

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (137)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1207

Cys Val Gly Lys Ala Gly Val Glu Leu Gly Cys Ser Gly Glu Gly Val 1 5 10 15

Val Lys Lys Ala Ser Ser Arg Gly His Lys Ala Arg Phe Pro Leu Arg 20 25 30

Ser His Lys Val Leu Ser Pro Ala Pro Gly Ala Gly Gly Val His Gly
35 40 45

Pro Gly Phe Thr Ser Thr His Pro Ala His Pro Arg Gly Glu Gly Pro 50 55 60

Arg Ala Pro Gly Pro Ala Ala Asp Arg Ile Leu Cys Lys Leu Cys Ser 65 70 75 80

Val His Cys Lys Thr Pro Ala Gln Leu Ala Gly His Met Gln Thr His 85 90 95

Leu Gly Gly Ala Ala Pro Leu Ser Arg Glu Thr Pro Pro Ser His Ser 100 105 110

Pro Pro Ala Glu Gly Asp Pro Arg Thr His Gln Val Leu Val Arg Phe 115 120 125

Val Gln Trp Arg Arg Gln Arg Gln Xaa Arg Gln Arg Gln Arg Gln

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1231

130 135 140 Gln 145 <210> 1208 <211> 378 <212> PRT <213> Homo sapiens <400> 1208 Ser Ala Ser Arg Ala Thr Ala Met Ser Ser Arg Gly Gly Lys Lys Lys Ser Thr Lys Thr Ser Arg Ser Ala Lys Ala Gly Val Ile Phe Pro Val Gly Arg Met Leu Arg Tyr Ile Lys Lys Gly His Pro Lys Tyr Arg Ile Gly Val Gly Ala Pro Val Tyr Met Ala Ala Val Leu Glu Tyr Leu Thr 55 Ala Glu Ile Leu Glu Leu Ala Gly Asn Ala Ala Arg Asp Asn Lys Lys Gly Arg Val Thr Pro Arg His Ile Leu Leu Ala Val Ala Asn Asp Glu Glu Leu Asn Gln Leu Leu Lys Gly Val Thr Ile Ala Ser Gly Gly Val 105 Leu Pro Asn Ile His Pro Glu Leu Leu Ala Lys Lys Arg Gly Ser Lys 120 Gly Lys Leu Glu Ala Ile Ile Thr Pro Pro Ala Lys Lys Ala Lys 135 Ser Pro Ser Gln Lys Lys Pro Val Ser Lys Lys Ala Gly Gly Lys Lys

Gly Ala Arg Lys Ser Lys Lys Gln Gly Glu Val Ser Lys Ala Ala Ser

Ala Asp Ser Thr Thr Glu Gly Thr Pro Ala Asp Gly Phe Thr Val Leu 180 185 190

Ser Thr Lys Ser Leu Phe Leu Gly Gln Lys Leu Asn Leu Ile His Ser 195 200 205

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1232

Glu Ile Ser Asn Leu Ala Gly Phe Glu Val Glu Ala Ile Ile Asn Pro 210 215 220

Thr Asn Ala Asp Ile Asp Leu Lys Asp Asp Leu Gly Asn Thr Leu Glu 225 230 235 240

Lys Lys Gly Gly Lys Glu Phe Val Glu Ala Val Leu Glu Leu Arg Lys 245 250 255

Lys Asn Gly Pro Leu Glu Val Ala Gly Ala Ala Val Ser Ala Gly His 260 265 270

Gly Leu Pro Ala Lys Phe Val Ile His Cys Asn Ser Pro Val Trp Gly 275 280 285

Ala Asp Lys Cys Glu Glu Leu Leu Glu Lys Thr Val Lys Asn Cys Leu 290 295 300

Ala Leu Ala Asp Asp Lys Lys Leu Lys Ser Ile Ala Phe Pro Ser Ile 305 310 315 320

Gly Ser Gly Arg Asn Gly Phe Pro Lys Gln Thr Ala Ala Gln Leu Ile 325 330 335

Leu Lys Ala Ile Ser Ser Tyr Phe Val Ser Thr Met Ser Ser Ser Ile 340 345 350

Lys Thr Val Tyr Phe Val Leu Phe Asp Ser Glu Ser Ile Gly Ile Tyr 355 360 365

Val Gln Glu Met Ala Lys Leu Asp Ala Asn 370 375

<210> 1209

<211> 220

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (10)

<223> Xaa equals any of the naturally occurring L-amino acids

<22	0>														
	1> S														
	2> (_		_										
<22	3> X	aa e	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
<40	0> 1	209													
			Lvs	Ile	Xaa	Asp	Thr	Phe	Xaa	Ara	ቸህዮ	Ala	Arg	Ara	ጥህ፣
1	2	2	-1-	5					10		-1-			15	-7.
Arg	Ser	Gly	Ile	Pro	Gly	Ser	Thr	His	Ala	Xaa	Ala	Pro	Gly	Ala	Met
			20		_			25					30		
_	±	•													
Arg	Leu		Leu	Pro	Leu	Leu		Leu	Leu	Leu	Gly		Trp	Ala	Ile
		35					40					45			
Pro	Gly	Gly	Leu	Gly	Asp	Arq	Ala	Pro	Leu	Thr	Ala	Thr	Ala	Pro	Glr
	50	_		_	-	55					60				
	Asp	Asp	Glu	Glu		Tyr	Ser	Ala	His		Pro	Ala	His	Leu	_
65					70					75					80
Cys	Asp	Ala	Cys	Arq	Ala	Val	Ala	Tvr	Gln	Met	Trp	Gln	Asn	Leu	Ala
•	•		•	85					90					95	
Lys	Ala	Glu		Lys	Leu	His	Thr		Asn	Ser	Gly	Gly	Arg	Arg	Glu
			100					105					110		
T.eu	Ser	Glu	T.e.ii	Val	Tur	Thr	Agn	Val	T.eu	Acn	Ara	Ser	Cys	50×	7 ~
		115	200	741	-1-	1111	120	Val	пец	чэр	лц	125	cys	261	ALG
Asn	Trp	Gln	Asp	Tyr	Gly	Val	Arg	Glu	Val	Asp	Gln	Val	Lys	Arg	Leu
	130					135					140				
m la	~1	D	~ 3	-		0 3	01		~ 1				_	•	
145	GTĀ	PIO	GIĀ	Leu	150	GIU	GIY	Pro	GIU	155	ser	IIe	Ser	Val	Met
					130					133					100
Val	Thr	Gly	Gly	Pro	Trp	Pro	Thr	Arg	Leu	Ser	Arg	Thr	Cys	Leu	His
				165					170					175	
_	_							_	_						
Tyr	Leu	Gly		Phe	Gly	Glu	Asp		Ile	Tyr	Glu	Ala	His	Gln	Gln
			180					185					190		
Gly	Arg	Gly	Ala	Leu	Glu	Ala	Leu	Leu	Cvs	Glv	Glv	Pro	Gln	Glv	Ala
-		195					200		- , -	1	1	205		1	
		Glu	Lys	Val	Ser			Arg	Glu	Glu					
	210					215					220				

<21	1> 2	31													
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<40	0> 1	210													
Ala 1	Leu	Ser	Pro	Ala 5	Met	Val	Val	Pro	Glu 10	Asp	Gln	Leu	Thr	Arg 15	Tr
His	Pro	Arg	Phe 20	Asn	Val	Asp	Glu	Val 25	Pro	Asp	Ile	Glu	Pro 30	Ala	Ala
Leu	Pro	Gln 35	Pro	Pro	Ala	Thr	Glu 40	Lys	Leu	Thr	Thr	Ala 45	Gln	Glu	Va!
Leu	Ala 50	Arg	Ala	Arg	Asn	Leu 55	Ile	Ser	Pro	Arg	Met 60	Glu	Lys	Ala	Let
Ser 65	Gln	Leu	Ala	Leu	Arg 70	Ser	Ala	Ala	Pro	Ser 75	Ser	Pro	Gly	Ser	Pro 80
Arg	Pro	Ala	Leu	Pro 85	Ala	Thr	Pro	Pro	Ala 90	Thr	Pro	Pro	Ala	Ala 95	Ser
Pro	Ser	Ala	Leu 100	Lys	Gly	Val	Ser	Gln 105	Asp	Leu	Leu	Glu	Arg 110	Ile	Arg
Ala	Lys	Glu 115	Ala	Gln	Lys	Gln	Leu 120	Ala	Gln	Met	Thr	Arg 125	Cys	Pro	Glu
Gln	Glu 130	Gln	Arg	Leu	Gln	Arg 135	Leu	Glu	Arg	Leu	Pro 140	Glu	Leu	Ala	Arg
Val 145	Leu	Arg	Ser	Val	Phe 150	Val	Ser	Glu	Arg	Lys 155	Pro	Ala	Leu	Ser	Met
Glu	Val	Ala	Cys	Ala 165	Arg	Met	Val	Gly	Ser 170	Суз	Cys	Thr	Ile	Met 175	Ser
Pro	Gly	Glu	Met 180	Glu	Lys	His	Leu	Leu 185	Leu	Leu	Ser	Glu	Leu 190	Leu	Pro
Asp	Trp	Leu 195	Ser	Leu	His	Arg	Ile 200	Arg	Thr	Asp	Thr	Tyr 205	Val	Lys	Leu
Asp	Lys 210	Ala	Ala	Asp	Leu	Ala 215	His	Ile	Thr	Ala	Arg 220	Leu	Ala	His	Gln
Thr 225	Arg	Ala	Glu	Glu	Gly 230	Leu									

<21	0> 1: 1> 3: 2> Pi	46													
<21	3> н	omo :	sapi	ens											
<400)> 1	211													
Asn 1	Суз	Thr	Thr	Ile 5	Ser	Leu	Val	Tyr	Leu 10	His	Phe	Val	Phe	Tyr 15	Asn
Ser	Tyr	Ser	Leu 20	Phe	Pro	Ser	Lys	Glu 25	Asn	Cys	Val	Tyr	Glu 30	Thr	Val
Val	Leu	Pro 35	Leu	Asp	Glu	Arg	Ala 40	Phe	Glu	Lys	Thr	Leu 45	Thr	Pro	Ile
Ile	Gln 50	Glu	Tyr	Phe	Glu	His 55	Gly	Asp	Thr	Asn	Glu 60	Val	Ala	Glu	Met
Leu 65	Arg	Asp	Leu	Asn	Leu 70	Gly	Glu	Met	Lys	Ser 75	Gly	Val	Pro	Val	Leu 80
Ala	Val	Ser	Leu	Ala 85	Leu	Glu	Gly	Lys	Ala 90	Ser	His	Arg	Glu	Met 95	Thr
Ser	Lys	Leu	Leu 100	Ser	Asp	Leu	Cys	Gly 105	Thr	Val	Met	Ser	Thr 110	Thr	Asp
Val	Glu	Lys 115	Ser	Phe	Asp	Lys	Leu 120	Leu	Lys	Asp	Leu	Pro 125	Glu	Leu	Ala
Leu	Asp 130	Thr	Pro	Arg	Ala	Pro 135	Gln	Leu	Val	Gly	Gln 140	Phe	Ile	Ala	Arg
Ala 145	Val	Gly	Asp	Gly	Ile 150	Leu	Суз	Asn	Thr	Туг 155	Ile	Asp	Ser	Tyr	Lys 160
Gly	Thr	Val	Asp	Cys 165	Val	Gln	Ala	Arg	Ala 170	Ala	Leu	Asp	Lys	Ala 175	Thr
Val	Leu	Leu	Ser 180	Met	Ser	Lys	Gly	Gly 185	Lys	Arg	Lys	Asp	Ser 190	Val	Trp
Gly	Ser	Gly 195	Gly	Gly	Gln	Gln	Ser 200	Val	Asn	His	Leu	Val 205	Lys	Glu	Ile
Asp	Met 210	Leu	Leu	Lys	Glu	Туг 215	Leu	Leu	Ser	Gly	Asp 220	Ile	Ser	Glu	Ala
Glu 225	His	Cys	Leu	Lys	Glu 230	Leu	Glu	Val	Pro	His 235	Phe	His	His	Glu	Leu 240

Ile Thr Val Asp Gln Met Lys Arg Gly Tyr Glu Arg Ile Tyr Asn Glu 275 280 285

265

Ile Pro Asp Ile Asn Leu Asp Val Pro His Ser Tyr Ser Val Leu Glu 290 295 300

Arg Phe Val Glu Glu Cys Phe Gln Ala Gly Ile Ile Ser Lys Gln Leu 305 310 315 320

Arg Asp Leu Cys Pro Ser Arg Gly Arg Lys Arg Phe Val Ser Glu Gly 325 330 335

Asp Gly Gly Arg Leu Lys Pro Glu Ser Tyr 340 345

<210> 1212

<211> 175

<212> PRT

<213> Homo sapiens

<220>

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<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (63)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1212

Pro Arg Xaa Ile Val Ser Ala Ala Cys Gly Arg Asn His Thr Leu Ala 1 5 10 15

Leu Thr Glu Thr Gly Ser Val Phe Ala Phe Gly Glu Asn Lys Met Gly 20 25 30

Gln Leu Gly Leu Gly Asn Gln Thr Asp Ala Val Pro Ser Pro Ala Gln 35 40 45

Ile Met Tyr Asn Gly Gln Pro Ile Thr Lys Met Ala Cys Gly Xaa Glu 50 55 60

Phe Ser Met Ile Met Asp Cys Lys Gly Asn Leu Tyr Ser Phe Gly Cys Pro Glu Tyr Gly Gln Leu Gly His Asn Ser Asp Gly Lys Phe Ile Ala 90 Arg Ala Gln Arg Ile Glu Tyr Asp Cys Glu Leu Val Pro Arg Arg Val 100 105 Ala Ile Phe Ile Glu Lys Thr Lys Asp Gly Gln Ile Leu Pro Val Pro 120 Asn Val Val Arg Asp Val Ala Cys Gly Ala Asn His Thr Leu Val Leu Asp Ser Gln Lys Arg Val Phe Ser Trp Gly Phe Gly Gly Tyr Gly Arg Leu Gly Thr Gln Ser Arg Arg Met Arg Trp Ser Pro Ala Trp. 165 170 <210> 1213 <211> 127 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (41) <223> Xaa equals any of the naturally occurring L-amino acids Cys Phe Ile Cys Val Trp Cys Lys Arg Lys Leu Asp Gln Ile Asn Leu Gln Leu Met Ser Pro Asn Ala Asn Thr Gly Thr His Met His Thr Pro 25 Ile Asn Thr His Thr Val His Leu Xaa Lys Gly Gln Val Ile Ser His 35 40 Pro Asn Phe Thr Ser Thr Asp Pro Leu Ala Pro Thr Pro Ala Ser Thr 55

Val Thr Ser Lys Ala Arg Ala Thr Cys Ala His Gln Thr Cys Ile Lys

Gln Leu Ala Gly Asp Gly Cys Gly Ala Gly Gly Leu Ser Asp Gly Ser

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85 90 95

Leu Leu Leu Pro Leu Leu Arg Val Lys Leu Leu Ser Phe Leu Arg Val 100 105 110

Tyr Leu Cys Gln Val Cys Ala Phe Asn Cys Phe Tyr Phe Val Phe 115 120 125

<210> 1214

<211> 146

<212> PRT

<213> Homo sapiens

<400> 1214

Cys Thr Trp Asn Arg Cys Ser Ala Ser Pro Ala Gly Trp Gln Asn Ser 1 5 10 15

Phe Leu Gly His Leu Asn Pro Ser Ser Leu Leu Gln Asn Pro Pro Ala 20 25 30

Asn Arg Ile Gly Met Gly Ala Thr Leu Asp Ile Gln Arg Gln Gln Arg 35 40 45

Met Glu Leu Leu Asp Arg Gln Leu Met Phe Ser Gln Phe Ala Gln Gly 50 55 60

Arg Arg Gln Arg Gln Gln Gln Gly Gly Met Ile Asn Trp Asn Arg Leu 65 70 75 80

Phe Pro Pro Leu Arg Gln Arg Gln Asn Val Asn Tyr Gln Gly Gly Arg 85 90 95

Gln Ser Glu Pro Ala Ala Pro Pro Leu Glu Val Ser Glu Glu Gln Val 100 105 110

Ala Arg Leu Met Glu Met Gly Phe Ser Arg Gly Asp Ala Leu Glu Ala 115 120 125

Leu Arg Ala Ser Asn Asn Asp Leu Asn Val Ala Thr Asn Phe Leu Leu 130 135 140

Gln His 145

<210> 1215

<211> 116

<212> PRT

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<213> Homo sapiens
<220>
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<222> (107)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (108)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1215
Leu Lys Asn His Gln Lys Thr His Thr Ser Glu Lys Ser Tyr Lys Cys
                                                          15
Asn Glu Cys Arg Lys Ala Phe Ser Tyr Cys Ser Gly Leu Ile Gln Cys
                                 25
Gln Val Ile His Thr Ile Glu Lys Pro Tyr Glu Tyr Gly Lys Cys Gly
                             40
Lys Ala Phe Arg Gln Arg Thr Asp Leu Lys Lys His Gln Lys Met His
                         55
Thr Glu Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala Phe Ser
Gln Ser Thr Tyr Leu Thr Lys His Gln Lys Ile His Ser Glu Glu Lys
                 85
                                     90
Ser Asn Ile His Thr Glu Cys Gly Glu Thr Xaa Xaa Gln Asn Ser Ser
                                105
Phe Leu Gln Gln
       115
<210> 1216
<211> 201
<212> PRT
<213> Homo sapiens
<400> 1216
Ala Ala Gly Gly Glu Gly Phe Gly Ser Leu His Ala Ser Leu Val Gly
Phe Arg Gly Val Val Ala Gly Cys Ala Arg His Phe Arg Ala Ser Arg
             20
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Asn	Gly	Val 35	Ala	Asn	Gly	Leu	Gln 40	Ser	Asn	Met	Pro	Lys 45	Phe	Tyr	Сy
Asp	Tyr 50	Суз	Asp	Thr	Tyr	Leu 55	Thr	His	Asp	Ser	Pro 60	Ser	Val	Arg	Ly
Thr 65	His	Суз	Ser	Gly	Arg 70	Lys	His	Lys	Glu	Asn 75	Val	Lys	Asp	Tyr	Ty :
Gln	Lys	Trp	Met	Glu 85	Glu	Gln	Ala	Gln	Ser 90	Leu	Ile	Asp	Lys	Thr 95	Th
Ala	Ala	Phe	Gln 100	Gln	Gly	Lys	Ile	Pro 105	Pro	Thr	Pro	Phe	Ser 110	Ala	Pr
Pro	Pro	Ala 115	Gly	Ala	Met	Ile	Pro 120	Pro	Pro	Pro	Ser	Leu 125	Pro	Gly	Pro
Pro	Arg 130	Pro	Gly	Met	Met	Pro 135	Ala	Pro	His	Met	Gly 140	Gly	Pro	Pro	Me
Met 145	Pro	Met	Met	Gly	Pro 150	Pro	Pro	Pro	Gly	Met 155	Met	Pro	Val	Gly	Pro
Ala	Pro	Gly	Met	Arg 165	Pro	Pro	Met	Gly	Gly 170	His	Met	Pro	Met	Met 175	Pro
Gly	Pro	Pro	Met 180	Met	Arg	Pro	Pro	Ala 185	Arg	Pro	Met	Met	Val 190	Pro	Thi
Arg	Pro	Gly 195	Met	Thr	Arg	Pro	Asp 200	Arg							

<210> 1217

<211> 473

<212> PRT

<213> Homo sapiens

<400> 1217

Lys Phe Thr Met Lys Phe Leu Leu Ile Leu Leu Gln Ala Thr Ala l 1 5 10 15

Ser Gly Ala Leu Pro Leu Asn Ser Ser Thr Ser Leu Glu Lys Asn Asn 20 25 30

Val Leu Phe Gly Glu Arg Tyr Leu Glu Lys Phe Tyr Gly Leu Glu Ile
35 40 45

Asn Lys Leu Pro Val Thr Lys Met Lys Tyr Ser Gly Asn Leu Met Lys

	50					55					60				
Glu 65		Ile	Gln	Glu	Met 70	Gln	His	Phe	Leu	Gly 75		Lys	Val	Thr	Gly 80
Gln	Leu	Asp	Thr	Ser 85		Leu	Glu	Met	Met 90		Ala	Pro	Arg	Cys 95	Gly
Val	Pro	Asp	Val 100	His	His	Phe	Arg	Glu 105	Met	Pro	Gly	Gly	Pro 110	Val	Trp
Arg	Lys	His 115	туг	Ile	Thr	Tyr	Arg 120	Ile	Asn	Asn	Tyr	Thr 125	Pro	Asp	Met
Asn	Arg 130		Asp	Val	Asp	Туг 135	Ala	Ile	Arg	Lys	Ala 140	Phe	Gln	Val	Trp
Ser 145	Asn	Val	Thr	Pro	Leu 150	Lys	Phe	Ser	Lys	Ile 155	Asn	Thr	Gly	Met	Ala 160
Asp	Ile	Leu	Val	Val 165	Phe	Ala	Arg	Gly	Ala 170	His	Gly	Asp	Phe	His 175	Ala
Phe	Asp	Gly	Lys 180	Gly	Gly	Ile	Leu	Ala 185	His	Ala	Phe	Gly	Pro 190	Gly	Ser
Gly	Ile	Gly 195	Gly	Asp	Ala	His	Phe 200	Asp	Glu	Asp	Glu	Phe 205	Trp	Thr	Thr
His	Ser 210	Gly	Gly	Thr	Asn	Leu 215	Phe	Leu	Thr	Ala	Val 220	His	Glu	Ile	Gly
His 225	Ser	Leu	Gly	Leu	Gly 230	His	Ser	Ser	Asp	Pro 235	Lys	Ala	Val	Met	Phe 240
Pro	Thr	Tyr	Lys	Туг 245	Val	Asp	Ile	Asn	Thr 250	Phe	Arg	Leu	Ser	Ala 255	Asp
4sp	Ile	Arg	Gly 260	Ile	Gln	Ser	Leu	Туг 265	Gly	Asp	Pro	Lys	Glu 270	Asn	Gln
arg	Leu	Pro 275	Asn	Pro	Asp	Asn	Ser 280	Glu	Pro	Ala	Leu	Cys 285	Asp	Pro	Asn
Leu	Ser 290	Phe	Asp	Aļa	Val	Thr 295	Thr	Val	Gly	Asn	Lys 300	Ile	Phe	Phe	Phe
05					310					315			Lys		320
al	Asn	Leu	Ile	Ser	Ser	Leu	Trp	Pro	Thr	Leu	Pro	Ser	Gly	Ile	Glu

325 330 335 Ala Ala Tyr Glu Ile Glu Ala Arg Asn Gln Val Phe Leu Phe Lys Asp 345 Asp Lys Tyr Trp Leu Ile Ser Asn Leu Arg Pro Glu Pro Asn Tyr Pro 360 Lys Ser Ile His Ser Phe Gly Phe Pro Asn Phe Val Lys Lys Ile Asp 375 Ala Ala Val Phe Asn Pro Arg Phe Tyr Arg Thr Tyr Phe Phe Val Asp 385 Asn Gln Tyr Trp Arg Tyr Asp Glu Arg Arg Gln Met Met Asp Pro Gly 405 410 Tyr Pro Lys Leu Ile Thr Lys Asn Phe Gln Gly Ile Gly Pro Lys Ile 425 Asp Ala Val Phe Tyr Ser Lys Asn Lys Tyr Tyr Tyr Phe Phe Gln Gly 440 Ser Asn Gln Phe Glu Tyr Asp Phe Leu Leu Gln Arg Ile Thr Lys Thr Leu Lys Ser Asn Ser Trp Phe Gly Cys 465 470 <210> 1218 <211> 598 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (9) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (144) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1218 Ala Thr Ser Arg Gln Pro Ser Tyr Xaa Arg Thr Trp Cys Arg Arg Cys Cys Leu Pro Leu Ala Leu Asn Pro Val Pro Ala Ala Met Ala Pro Gly

20 25 30 Gln Leu Ala Leu Phe Ser Val Ser Asp Lys Thr Gly Leu Val Glu Phe 40 Ala Arg Asn Leu Thr Ala Leu Gly Leu Asn Leu Val Ala Ser Gly Gly 55 Thr Ala Lys Ala Leu Arg Asp Ala Gly Leu Ala Val Arg Asp Val Ser Glu Leu Thr Gly Phe Pro Glu Met Leu Gly Gly Arg Val Lys Thr Leu His Pro Ala Val His Ala Gly Ile Leu Ala Arg Asn Ile Pro Glu Asp Asn Ala Asp Met Ala Arg Leu Asp Phe Asn Leu Ile Arg Val Val Ala 120 Cys Asn Leu Tyr Pro Phe Val Lys Thr Val Ala Ser Pro Gly Val Xaa 135 Val Glu Glu Ala Val Glu Gln Ile Asp Ile Gly Gly Val Thr Leu Leu 155 150 Arg Ala Ala Lys Asn His Ala Arg Val Thr Val Val Cys Glu Pro 165 17Ô Glu Asp Tyr Val Val Val Ser Thr Glu Met Gln Ser Ser Glu Ser Lys 185 Asp Thr Ser Leu Glu Thr Arg Arg Gln Leu Ala Leu Lys Ala Phe Thr 200 His Thr Ala Gln Tyr Asp Glu Ala Ile Ser Asp Tyr Phe Arg Lys Gln 215 Tyr Ser Lys Gly Val Ser Gln Met Pro Leu Arg Tyr Gly Met Asn Pro 230 His Gln Thr Pro Ala Gln Leu Tyr Thr Leu Gln Pro Lys Leu Pro Ile 245 Thr Val Leu Asn Gly Ala Pro Gly Phe Ile Asn Leu Cys Asp Ala Leu Asn Ala Trp Gln Leu Val Lys Glu Leu Lys Glu Ala Leu Gly Ile Pro 280 Ala Ala Ser Phe Lys His Val Ser Pro Ala Gly Ala Ala Val Gly

	290					295					300				
11e 305	Pro	Leu	Ser	Glu	Asp 310		Ala	Lys	Val	Cys 315		Val	Tyr	Asp	Let 320
Tyr	Lys	Thr	Leu	Thr 325		Ile	Ser	Ala	Ala 330	_	Ala	Arg	Ala	Arg 335	Gl
Ala	Asp	Arg	Met 340		Ser	Phe	Gly	Asp 345		Val	Ala	Leu	Ser 350	_	Val
Cys	Asp	Val 355		Thr	Ala	Lys	11e 360	Ile	Ser	Arg	Glu	Val 365		Asp	Gly
Ile	11e 370		Pro	Gly	Tyr	Glu 375	Glu	Glu	Ala	Leu	Thr 380	Ile	Leu	Ser	Lys
Lys 385	Lys	Asn	Gly	Asn	Tyr 390	Суз	Val	Leu	Gln	Met 395	Asp	Gln	Ser	Tyr	Lys 400
Pro	Asp	Glu	Asn	Glu 405	Val	Arg	Thr	Leu	Phe 410	_	Leu	His	Leu	Ser 415	Glr
Lys	Arg	Asn	Asn 420	Gly	Val	Val	Asp	Lys 425	Ser	Leu	Phe	Ser	Asn 430	Val	Val
Thr	Lys	Asn 435	Lys	Asp	Leu	Pro	Glu 440	Ser	Ala	Leu	Arg	Asp 445	Leu	Ile	Val
Ala	Thr 450	Ile	Ala	Val	Lys	Туг 455	Thr	Gln	Ser	Asn	Ser 460	Val	Cys	Tyr	Ala
Lys 465	Asn	Gly	Gln	Val	11e 470	Gly	Ile	Gly	Ala	Gly 475	Gln	Gln	Ser	Arg	Ile 480
His	Cys	Thr	Arg	Leu 485	Ala	Gly	Asp	Lys	Ala 490	Asn	Tyr	Trp	Trp	Leu 495	Arg
His	His	Pro	Gln 500	Val	Leu	Ser	Met	Lys 505	Phe	Lys	Thr	Gly	Val 510	Lys	Arg
Ala	Glu	Ile 515	Ser	Asn	Ala	Ile	Asp 520	Gln	Tyr	Val	Thr	Gly 525	Thr	Ile	Gly
Glu	Asp 530	Glu	Asp	Leu	Ile	Lys 535	Trp	Lys	Ala	Leu	Phe 540	Glu	Glu	Val	Pro
G1u 545	Leu	Leu	Thr	Glu	Ala 550	Glu	Lys	Lys	Glu	Trp 555	Val	Glu	Lys	Leu	Thr 560
Glu	Val	Ser	Ile	Ser	Ser	Asp	Ala	Phe	Phe	Pro	Phe	Arg	Asp	Asn	Val

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1245

565 570 575

Asp Arg Ala Lys Arg Ser Gly Val Ala Tyr Ile Ala Ala Pro Pro Val 580 585 590

Leu Leu Thr Lys Leu 595

<210> 1219

<211> 209

<212> PRT

<213> Homo sapiens

<400> 1219

Tyr Thr Ala Ile Met Ser Ile Met Ser Tyr Asn Gly Gly Ala Val Met

1 5 10 15

Ala Met Lys Gly Lys Asn Cys Val Ala Ile Ala Ala Asp Arg Phe
20 25 30

Gly Ile Gln Ala Gln Met Val Thr Thr Asp Phe Gln Lys Ile Phe Pro 35 40 45

Met Gly Asp Arg Leu Tyr Ile Gly Leu Ala Gly Leu Ala Thr Asp Val 50 60

Gln Thr Val Ala Gln Arg Leu Lys Phe Arg Leu Asn Leu Tyr Glu Leu 65 70 75 80

Lys Glu Gly Arg Gln Ile Lys Pro Tyr Thr Leu Met Ser Met Val Ala 85 90 95

Asn Leu Leu Tyr Glu Lys Arg Phe Gly Pro Tyr Tyr Thr Glu Pro Val 100 105 110

Ile Ala Gly Leu Asp Pro Lys Thr Phe Lys Pro Phe Ile Cys Ser Leu 115 120 125

Asp Leu Ile Gly Cys Pro Met Val Thr Asp Asp Phe Val Val Ser Gly 130 135 140

Thr Cys Ala Glu Gln Met Tyr Gly Met Cys Glu Ser Leu Trp Glu Pro 145 150 155 160

Asn Met Asp Pro Asp His Leu Phe Glu Thr Ile Ser Gln Ala Met Leu 165 170 175

Asn Ala Val Asp Arg Asp Ala Val Ser Gly Met Gly Val Ile Val His 180 185 190 Ile Ile Glu Lys Asp Lys Ile Thr Thr Arg Thr Leu Lys Ala Arg Met 195 200205

Asp

<210> 1220

<211> 140

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (51)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (64)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (77)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1220

Ile Ile Ser Ile Ile Ser Thr Ser Asn Lys Ile Lys Met Ser Glu Ala 1 5 10 15

Pro Arg Phe Phe Val Gly Pro Glu Asp Thr Glu Ile Asn Pro Gly Asn

Tyr Arg His Phe Phe His His Ala Asp Glu Asp Asp Glu Glu Glu Asp 35 40

Asp Ser Xaa Pro Glu Arg Gln Ile \dot{V} al Val Gly Ile Cys Ser Met Xaa 50 60

Lys Lys Ser Lys Ser Lys Pro Met Lys Glu Ile Leu Xaa Arg Ile Ser 65 70 75 80

Leu Phe Lys Tyr Ile Thr Val Val Val Phe Glu Glu Glu Val Ile Leu 85 90 95

Asn Glu Pro Val Glu Asn Trp Pro Leu Cys Asp Cys Leu Ile Ser Phe 100 105 110

His Ser Lys Gly Phe Pro Leu Asp Lys Ala Val Ala Tyr Ala Lys Leu 115 120 125

Arg Asn Pro Phe Val Ile Asn Asp Leu Asn Met Gln 130 135 140

<210> 1221

<211> 45

<212> PRT

<213> Homo sapiens

<400> 1221

Gly Leu Met Glu Ile Glu Ile Thr Cys Lys Asp Ile Thr Val Phe Met
1 5 10 15

Ser Tyr Ile Leu Val Leu Glu Ile Val Glu Cys Met Ile Asp Asn Ile-20 25 30

Phe Leu Ile Phe Ile Phe Ser Ser Asn Thr Ser Thr Val
35 40 45

<210> 1222

<211> 70

<212> PRT

<213> Homo sapiens

<400> 1222

Val Ala Tyr Ile Cys Tyr Ser Lys Phe Cys Lys Tyr Ala Asn Gln Leu 1 5 10

Tyr Arg Phe Ile Thr Ser Phe Leu Gly Phe Phe Trp Gly Arg Val Ile 20 25 30

Ile Leu Leu Lys Ile Thr Met Asn Thr Leu Thr Val Arg Ile Cys Gly $35 \hspace{1cm} 40 \hspace{1cm} 45$

Lys Val Pro Leu Asn Ile Thr Lys Ile Ile Ser Leu Glu Gly Arg Asn 50 55 60

Asn His Ser Asn Glu Leu 65 70

<210> 1223

<211> 88

<212> PRT

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<213> Homo sapiens
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<400> 1223

Phe Tyr Pro Ser Thr Tyr Leu Lys Ala Pro Ser Ser Leu Val Cys Gly
1 5 10 15

Val Leu Glu Pro Val Ser Ser Phe Trp Arg Phe Lys Leu Asn Ser Asn 20 25 30

As Tyr Val Thr Gln Ser Met Trp Arg Lys Ser Glu Thr Ser His Gly 35 40 45

Asp Ala Gly Pro Arg Ala Arg Pro Ala Val Trp Pro Ala Leu Leu Thr 50 55 60

Ser Val Ser Arg Ser Phe Pro Ser His Glu Val Pro Ser Gly His Gly 65 70 75 80

Asp Glu Gly Arg Glu Gly Thr Gly

85

<210> 1224

<211> 298

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (279)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1224

Ala Thr Arg Arg Arg Ala Ala Glu Ala Gly Met Ala Ala Val Leu Gln
1 10 15

Arg Val Glu Arg Leu Ser Asn Arg Val Val Arg Val Leu Gly Cys Asn 20 25 30

Pro Gly Pro Met Thr Leu Gln Gly Thr Asn Thr Tyr Leu Val Gly Thr 35 40 45

Gly Pro Arg Arg Ile Leu Ile Asp Thr Gly Glu Pro Ala Ile Pro Glu 50 55 60

Tyr Ile Ser Cys Leu Lys Gln Ala Leu Thr Glu Phe Asn Thr Ala Ile 65 70 75 80

Gln Glu Ile Val Val Thr His Trp His Arg Asp His Ser Gly Gly Ile 85 90 95

Gly Asp Ile Cys Lys Ser Ile Asn Asn Asp Thr Thr Tyr Cys Ile Lys 105 100 Lys Leu Pro Arg Asn Pro Gln Arg Glu Glu Ile Ile Gly Asn Gly Glu 120 Gln Gln Tyr Val Tyr Leu Lys Asp Gly Asp Val Ile Lys Thr Glu Gly 135 Ala Thr Leu Arg Val Leu Tyr Thr Pro Gly His Thr Asp Asp His Met 150 155 Ala Leu Leu Glu Glu Glu Asn Ala Ile Phe Ser Gly Asp Cys Ile 170 Leu Gly Glu Gly Thr Thr Val Phe Glu Asp Leu Tyr Asp Tyr Met Asn 180 185 Ser Leu Lys Glu Leu Leu Lys Ile Lys Ala Asp Ile Ile Tyr Pro Gly 200 His Gly Pro Val Ile His Asn Ala Glu Ala Lys Ile Gln Gln Tyr Ile Ser His Arg Asn Ile Arg Glu Gln Gln Ile Leu Thr Leu Phe Arg Glu Asn Phe Glu Lys Ser Phe Thr Val Met Glu Leu Val Lys Ile Ile Tyr 245 250 Lys Asn Thr Pro Glu Asn Leu His Glu Met Ala Lys His Asn Leu Leu 260 265 Leu His Leu Lys Lys Leu Xaa Lys Glu Gly Lys Ile Phe Ser Asn Thr 280 Asp Pro Asp Lys Lys Trp Lys Ala His Leu 290

<210> 1225

<211> 27

<212> PRT

<213> Homo sapiens

<400> 1225

Val Ser Gly Asp Tyr Gly His Pro Val Tyr Ile Val Gln Asp Gly Pro l 5 10 15

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1250

Pro Gln Ser Pro Pro Asn Ile Tyr Tyr Lys Val

<210> 1226 <211> 380 <212> PRT <213> Homo sapiens <400> 1226 Glu Gln Glu Leu Asp Thr Leu Lys Arg Lys Ser Pro Ser Asp Leu Trp 10 Lys Glu Asp Leu Ala Thr Phe Ile Glu Glu Leu Glu Ala Val Glu Ala Lys Glu Lys Gln Asp Glu Gln Val Gly Leu Pro Gly Lys Val Gly Lys Ala Lys Gly Lys Lys Thr Gln Met Ala Glu Val Leu Pro Ser Pro Arg 55 Gly Gln Arg Val Ile Pro Arg Ile Thr Ile Glu Met Lys Ala Glu Ala Glu Lys Lys Asn Lys Lys Lys Ile Lys Asn Glu Asn Thr Glu Gly Ser 85 Pro Gln Glu Asp Gly Val Glu Leu Glu Gly Leu Lys Gln Arg Leu Glu Lys Lys Gln Lys Arg Glu Pro Gly Thr Lys Thr Lys Lys Gln Thr Thr 120 Leu Ala Phe Lys Pro Ile Lys Lys Gly Lys Lys Arg Asn Pro Trp Ser 135 Asp Ser Glu Ser Asp Arg Ser Ser Asp Glu Ser Asn Phe Asp Val Pro 150 155 Pro Arg Glu Thr Glu Pro Arg Arg Ala Ala Thr Lys Thr Lys Phe Thr 165 170 Met Asp Leu Asp Ser Asp Glu Asp Phe Ser Asp Phe Asp Glu Lys Thr Asp Asp Glu Asp Phe Val Pro Ser Asp Ala Ser Pro Pro Lys Thr Lys 200

Thr Ser Pro Lys Leu Ser Asn Lys Glu Leu Lys Pro Gln Lys Ser Val

	210					215					220				
Val 225	Ser	Asp	Leu	Glu	Ala 230	Asp	Asp	Val	Lys	Gly 235	Ser	Val	Pro	Leu	Ser 240
Ser	Ser	Pro	Pro	Ala 245	Thr	His	Phe	Pro	Asp 250	Glu	Thr	Glu	Ile	Thr 255	Asn
Pro	Val	Pro	Lys 260	Lys	Asn	Val	Thr	Val 265	Lys	Lys	Thr	Ala	Ala 270	Lys	Ser
Gln	Ser	Ser 275	Thr	Ser	Thr	Thr	Gly 280	Ala	Lys	Lys	Arg	Ala 285	Ala	Pro	Lys
Gly	Thr 290	Lys	Àrg	Asp	Pro	Ala 295	Leu	Asn	Ser	Gly	Val 300	Ser	Gln	Lys	Pro
Asp 305	Pro	Ala	Lys	Thr	Lys 310	Asn	Arg	Arg	Lys	Arg 315	Lys	Pro	Ser	Thr	Ser 320
Asp	Asp	Ser	Asp	Ser 325	Asn	Phe	Glu	Lys	11e 330	Val	Ser	Lys	Ala	Val 335	Thr
Ser	Lys	Lys	Ser 340	Lys	Gly	Glu	Ser	Asp 345	Asp	Phe	His	Met	Asp 350	Phe	Asp
Ser	Ala	Val 355	Ala	Pro	Arg	Ala	Lys 360	Ser	Val	Arg	Ala	Lys 365	Lys	Pro	Ile
Lys	Tyr 370	Leu	Glu	Glu	Ser	Asp 375	Glu	Asp	Asp	Leu	Phe 380				
<211 <212)> 12 l> 78 2> PF 3> Ho	} RT	sapie	ens											
<220 <221)> L> S1	ጥድ													
<222	?> (2	(6)	juals	any	, of	the	nati	ırall	Ly o	curi	cing	L-ar	nino	acio	is
)> 12 Asn		Leu	Lys 5	Cys	Leu	Phe	Gly	Ile 10	Met	Ile	Gly	Asn	Leu 15	Asp
Glu	Phe	Arg	Gly	Lys	Lys	Leu	Ser	Ala	Xaa	Met	Leu	Arg	Ala	His	Leu

Ser Pro His Thr Pro Thr Glu Leu Thr Gly Leu Gln Cys Phe Ile Arg
35 40 45

Lys Phe Pro Ile Pro Leu Ser Cys Val Phe Met Leu Lys Ile Leu Leu

50 55 60

His Phe Ser Phe Glu Cys Gln Phe Leu Thr Ser Thr Ile Ser 65 70 75

<210> 1228

<211> 222

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (142)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1228

Ala Asn Glu Lys Val Ala Leu Gln Lys Ala Leu Leu Tyr Tyr Glu Ser 1 5 10 15

Ile His Gly Arg Pro Val Thr Lys Asn Glu Arg Gln Val Met Lys Pro

Leu Tyr Asp Arg Tyr Arg Leu Val Lys Gln Ile Leu Ser Arg Ala Asn 35 40 45

Thr Ile Pro Ile Ile Gly Ser Pro Ser Ser Lys Arg Arg Ser Pro Leu 50 60

Leu Gln Pro Ile Ile Glu Gly Glu Thr Ala Ser Phe Phe Lys Glu Ile 65 70 75 80

Lys Glu Glu Glu Glu Gly Ser Glu Asp Asp Ser Asn Val Lys Pro Asp 85 90 95

Phe Met Val Thr Leu Lys Thr Asp Phe Ser Ala Arg Cys Phe Leu Asp 100 105 110

Gln Phe Glu Asp Asp Ala Asp Gly Phe Ile Ser Pro Met Asp Asp Lys 115 120 125

Ile Pro Ser Lys Cys Ser Gln Asp Thr Gly Leu Ser Asn Xaa His Ala 130 135 140

Ala Ser Ile Pro Glu Leu Leu Glu His Leu Gln Glu Met Arg Glu Glu 145 150 155 160

Lys Lys Arg Ile Arg Lys Lys Leu Arg Asp Phe Glu Asp Asn Phe Phe 165 170 175

Arg Gln Asn Gly Arg Asn Val Gln Lys Glu Asp Arg Thr Pro Met Ala 180 185 190

Glu Glu Tyr Ser Glu Tyr Lys His Ile Lys Ala Lys Leu Arg Leu Leu 195 200 205

Glu Val Leu Ile Ser Lys Arg Asp Thr Asp Ser Lys Ser Met 210 215 220

<210> 1229

<211> 220

<212> PRT

<213> Homo sapiens

<400> 1229

Lys Gly Ser Thr Leu Gly His Leu Cys Thr Ala Met Ala Gly Met Met $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Lys Gly Ile Arg Trp Ser Cys Pro Ala Ile Ala Ser Ile Ser Gln Thr
20 25 30

Arg Ser Ser Gln Glu Lys Asp Ser Ser Ser Pro Pro Trp Asp Leu Arg

Arg Ala Ala Thr Glu Gly Glu Ala Pro Asp Ala Leu Cys Gln Ser Gln 50 60

Val Arg Gly Gln Ser Ser Pro Cys His Pro Trp Cys Arg Pro Ala Pro 65 70 75 80

Ser Ser Phe Met Pro Gly Pro Ala Gly Thr Pro Ala Thr Thr Glu Ser 85 90 95

Thr Arg Ser Ala Leu Cys Ser Trp Arg Arg His Ser Arg Val Glu Ser 100 105 110

Cys Pro Ser Leu Ser Leu Gly His Leu Gly Gly Glu Ser Gly Leu Arg 115 120 125

Ser Glu Leu Asp Pro Gly Asp Leu Gly Ser Phe Phe Leu Ala His Gln 130 135 140

Pro Cys Arg Pro His Leu Ser Gln Asn Pro Leu Cys Leu Gly Gly Ser 145 150 155 160

Gly Ser Ala Leu Leu Cys Ser Arg Arg Leu Gly Ser Gly Gln His Gln
165 170 175

Val Gly Lys Trp Ser Pro Pro Ser Cys Phe Cys Arg Ile Leu Thr Val 180 185 190

Gly Leu Glu Glu Lys Ser Ile Asp Leu Ile Ser Pro Thr Thr His Pro 195 200 205

Ser Phe Ser Phe Phe His His Ser Pro Pro Gln Leu 210 215 220

<210> 1230

<211> 183

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (11)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<222> (19)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (30)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1230

Glu Leu Lys Arg Leu Thr Ile Gly Lys Asn Xaa Xaa Arg Leu Thr Gly
1 5 10 15

Asn Arg Xaa Gly Ile Pro Gly Ser Thr His Ala Ser Glu Xaa Glu Val 20 25 30

Glu Glu Glu Gly Asp Val Asp Ser Asp Glu Glu Glu Glu Asp Glu

Glu Ser Ser Glu Gly Leu Glu Ala Glu Asp Trp Ala Gln Gly Val

Val Glu Ala Gly Gly Ser Phe Gly Ala Tyr Gly Ala Gln Glu Glu Ala 65 70 75 80

Gln Cys Pro Thr Leu His Phe Leu Glu Gly Gly Glu Asp Ser Asp Ser 85 90 95

Asp Ser Glu Glu Glu Asp Asp Glu Glu Glu Asp Asp Glu Asp 100 105 110

Asp Asp Asp Glu Glu Asp Gly Asp Glu Val Pro Val Pro Ser Phe 115 120 125

Gly Glu Ala Met Ala Tyr Phe Ala Met Val Lys Arg Tyr Leu Thr Ser 130 140

Phe Pro Ile Asp Asp Arg Val Gln Ser His Ile Leu His Leu Glu His 145 150 155 160

Asp Leu Val His Val Thr Arg Lys Asn His Ala Arg Gln Ala Gly Val 165 170 175

Arg Gly Leu Gly His Gln Ser 180

<210> 1231

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1231

Asn Leu Tyr Lys Leu Lys Leu Asn His Glu Leu Gln Lys Lys Ser Ile 1 5 10 15

Leu Pro Lys Leu Asp Val Thr Thr Leu Thr Ser Leu Lys Tyr Glu Val 20 25 30

Asp Cys Leu Lys Asp Ser Ala Tyr Ile Leu Val Cys Thr Phe Arg Asn 35 40 45

Ile Phe Leu Gly Lys Ser Thr Gln His Phe Leu 50 55

<210> 1232

<211> 135

<212> PRT

<213> Homo sapiens

<400> 1232 Gly Ser Thr His Ala Ser Gly Pro Pro Gln Ala Pro Gln Leu Ile Tyr Gln Glu Tyr Val Asn Gln Pro Asp Val Arg Pro Gln Pro Pro Ser Pro Arg Glu Gly Pro Leu Pro Ala Ala Arg Pro Ala Gly Ala Thr Leu Glu Arg Ala Lys Thr Leu Ser Pro Gly Lys Asn Gly Val Val Lys Asp Val Phe Ala Phe Gly Gly Ala Val Glu Asn Pro Glu Tyr Leu Thr Pro Gln Gly Gly Ala Ala Pro Gln Pro His Pro Pro Pro Ala Phe Ser Pro Ala 90 Phe Asp Asn Leu Tyr Tyr Trp Asp Gln Asp Pro Pro Glu Arg Gly Ala 105 Pro Pro Ser Thr Phe Lys Gly Thr Pro Thr Ala Glu Asn Pro Glu Tyr 120 Leu Gly Leu Asp Val Pro Val 130 <210> 1233 <211> 134 <212> PRT <213> Homo sapiens <400> 1233 Arg Gly Glu Thr Arg Glu Met Ala Gly Asn Leu Leu Ser Gly Ala Gly Arg Arg Leu Trp Asp Trp Val Pro Leu Ala Cys Arg Ser Phe Ser Leu 25 Gly Val Pro Arg Leu Ile Gly Ile Arg Leu Thr Leu Pro Pro Lys 40 Val Val Asp Arg Trp Asn Glu Lys Arg Ala Met Phe Gly Val Tyr Asp Asn Ile Gly Ile Leu Gly Asn Phe Glu Lys His Pro Lys Glu Leu Ile

Arg Gly Pro Ile Trp Leu Arg Gly Trp Lys Gly Asn Glu Leu Gln Arg 85 90 95

Cys Ile Arg Lys Arg Lys Met Val Gly Ser Arg Met Phe Ala Asp Asp 100 105 110

Leu His Asn Leu Asn Lys Arg Ile Arg Tyr Leu Tyr Lys His Phe Asn 115 120 125

Arg His Gly Lys Phe Arg 130

<210> 1234

<211> 282

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (18)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1234

Thr Gly Pro Glu Phe Pro Gly Xaa Pro Thr Arg Pro Arg Thr Ala Ala
1 5 10 15

Ala Xaa Ser Ala Arg Thr Arg Thr Arg Gly Ser Pro Arg Met Gly Glu
20 25 30

Phe Asn Glu Lys Lys Thr Thr Cys Gly Thr Val Cys Leu Lys Tyr Leu 35 40

Leu Phe Thr Tyr Asn Cys Cys Phe Trp Leu Ala Gly Leu Ala Val Met 50 55 60

Ala Val Gly Ile Trp Thr Leu Ala Leu Lys Ser Asp Tyr Ile Ser Leu 65 70 75 80

Leu Ala Ser Gly Thr Tyr Leu Ala Thr Ala Tyr Ile Leu Val Val Ala 85 90 95

Gly Thr Val Val Met Val Thr Gly Val Leu Gly Cys Cys Ala Thr Phe 100 105 110

Lys	Glu	Arg 115	Arg	·Asn	Leu	Leu	Arg 120	Leu	Tyr	Phe	Ile	Leu 125	Leu	Leu	Ile
Ile	Phe 130	Leu	Leu	Glu	Ile	Ile 135	Ala	Gly	Ile	Leu	Ala 140	Tyr	Ala	Tyr	Tyr
Gln 145	Gln	Leu	Asn	Thr	Glu 150	Leu	Lys	Glu	Asn	Leu 155	Lys	Asp	Thr	Met	Thr 160
Lys	Arg	Tyr	His	Gln 165	Pro	Gly	His	Glu	Ala 170	Val	Thr	Ser	Ala	Val 175	Asp
Gln	Leu	Gln	Gln 180	Glu	Phe	His	Cys	Cys 185	Gly	Ser	Asn	Asn	Ser 190	Gln	Asp
Trp	Arg	Asp 195	Ser	Glu	Trp	Ile	Arg 200	Ser	Gln	Glu	Ala	Gly 205	Gly	Arg	Val
Val	Pro 210	Asp	Ser	Cys	Cys	Lys 215	Thr	Val	Val	Ala	Leu 220	Cys	Gly	Gln	Arg
Asp 225	His	Ala	Ser	Asn	Ile 230	Tyr	Lys	Val	Glu	Gly 235	Gly	Cys	Ile	Thr	Lys 240
Leu	Glu	Thr	Phe	Ile 245	Gln	Glu	His	Leu	Arg 250	Val	Ile	Gly	Ala	Val 255	Gly
Ile	Gly	Ile	Ala 260	Cys	Val	Gln	Val	Phe 265	Gly	Met	Ile	Phe	Thr 270	Суз	Суз
Leu	Tyr	Arg 275	Ser	Leu	Lys	Leu	Glu 280	His	Tyr						•
<210	> 12	35													

<211> 66 <212> PRT

<213> Homo sapiens

<400> 1235

Ala Glu Ile Gln Val Phe Gln Val Gly Leu Val Ser Trp Gly Leu Tyr

Asn Pro Cys Leu Gly Ser Ala Asp Lys Asn Ser Arg Lys Arg Ala Pro 25

Arg Ser Lys Val Pro Pro Pro Arg Asp Phe His Ile Asn Leu Phe Arg 40

Met Gln Pro Trp Leu Arg Gln His Leu Gly Asp Val Leu Asn Phe Leu 50 55

Pro Leu 65

<210> 1236

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1236

Ala Arg Arg Arg Gly Gly Trp Ala Gly Gly Gly Gly Gly Thr Arg

1 5 10 15

Arg Ala Leu Gly Val Pro Val Ala Arg Arg Arg Arg Met Trp Arg Ala 20 25 30

Glu Gly Lys Trp Leu Pro Lys Thr Ser Arg Lys Ser Val Ser Gln Ser 35 40 45

Val Phe Cys Gly Thr Ser Thr Tyr Cys Val Leu Asn Thr Val Pro Pro 50 55 60

Ile Glu Asp Asp His Gly Asn Ser Asn Ser Ser His Val Lys Ile Phe 65 70 75 80

Leu Pro Lys Lys Leu Leu Glu Cys Leu Pro Lys Cys Ser Ser Leu Pro 85 90 95

Lys Glu Arg His Arg Trp Asn Thr Asn Glu Arg Ser 100 105

<210> 1237

<211> 116

<212> PRT

<213> Homo sapiens

<400> 1237

Arg Gly Gly Ser Lys Gly Asn Glu Val Arg Pro Val Ala Gly Ser 1 5 10 15

Ala Glu Ser Ala Ala Leu Arg Leu Arg Ala Pro Leu Gln Gln Val Gln 20 25 30

Ala Gln Leu Ser Pro Leu Gln Asn Ile Ser Pro Trp Ile Leu Ala Val 35 40

PCT/US00/05882

Leu Thr Leu Gln Ile Gln Ser Leu Ile Ser Cys Trp Ala Phe Trp Thr
50 55 60

Thr Trp Thr Gln Ser Cys Ser Ser Asn Ala Leu Pro Gln Ser Leu Pro 65 70 75 80

Ala Trp Arg Ser Ser Gln Arg Ser Thr Gln Lys Asp Pro Val Pro Tyr 85 90 95

Gln Pro Pro Phe Leu Cys Gln Trp Gly Arg His Gln Pro Ser Trp Lys 100 105 110

Pro Leu Met Asn 115

<210> 1238

<211> 311

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (16)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1238

Val Thr Ser Glu Gly Val Arg Val Arg Ser Ser Arg Gly Arg Ala Xaa 1 5 10 15

Gly Val Trp Arg Phe Glu Arg Asp Glu Asp Gly Thr Gly Ala Gly Cys $20 \hspace{1cm} 25 \hspace{1cm} 30$

Gly Gln Trp Thr Arg Phe Cys Arg Glu Pro Lys Met Ala Val Asn Val 35 40 45

Tyr Ser Thr Ser Val Thr Ser Asp Asn Leu Ser Arg His Asp Met Leu 50 60

Ala Trp Ile Asn Glu Ser Leu Gln Leu Asn Leu Thr Lys Ile Glu Gln 65 70 75 80

Leu Cys Ser Gly Ala Ala Tyr Cys Gln Phe Met Asp Met Leu Phe Pro 85 90 95

Gly Ser Ile Ala Leu Lys Lys Val Lys Phe Gln Ala Lys Leu Glu His $100 \hspace{1cm} 105 \hspace{1cm} 110$

Glu Tyr Ile Gln Asn Phe Lys Ile Leu Gln Ala Gly Phe Lys Arg Met

WO 00/55350 PCT/US00/05882

1261

120 115 125 Gly Val Asp Lys Ile Ile Pro Val Asp Lys Leu Val Lys Gly Lys Phe 135 Gln Asp Asn Phe Glu Phe Val Gln Trp Phe Lys Lys Phe Phe Asp Ala 155 150 Asn Tyr Asp Gly Lys Asp Tyr Asp Pro Val Ala Ala Arg Gln Gly Gln 170 165 Glu Thr Ala Val Ala Pro Ser Leu Val Ala Pro Ala Leu Asn Lys Pro 180 185 Lys Lys Pro Leu Thr Ser Ser Ser Ala Ala Pro Gln Arg Pro Ile Ser 200 Thr Gln Arg Thr Ala Ala Ala Pro Lys Ala Gly Pro Gly Val Val Arg 215 220 Lys Asn Pro Gly Val Gly Asn Gly Asp Asp Glu Ala Ala Glu Leu Met 230 Gln Gln Val Asn Val Leu Lys Leu Thr Val Glu Asp Leu Glu Lys Glu 245 250 Arg Asp Phe Tyr Phe Gly Lys Leu Arg Asn Ile Glu Leu Ile Cys Gln 260 Glu Asn Glu Gly Glu Asn Asp Pro Val Leu Gln Arg Ile Val Asp Ile Leu Tyr Ala Thr Asp Glu Gly Phe Val Ile Pro Asp Glu Gly Gly Pro 290 295 Gln Glu Glu Glu Glu Tyr 305 <210> 1239 <211> 345 <212> PRT <213> Homo sapiens Ala Ala Arg Leu Ala Val Glu Met Lys Thr Asp Leu Leu Ile Val Leu

Ser Asp Val Glu Gly Leu Phe Asp Ser Pro Pro Gly Ser Asp Asp Ala 20 25 30

Lys	Leu	Ile 35	Asp	Ile	Phe	Tyr	Pro 40	Gly	Asp	Gln	Gln	Ser 45	Val	Thr	Phe
Gly	Thr 50		Ser	Arg	Val	Gly 55	Met	Gly	Gly	Met	Glu 60	Ala	Lys	Val	Lys
Ala 65	Ala	Leu	Trp	Ala	Leu 70	Gln	Gly	Gly	Thr	Ser 75		Val	Ile	Ala	Asr 80
Gly	Thr	His	Pro	Lys 85	Val	Ser	Gly	His	Val 90	Ile	Thr	Asp	Ile	Val 95	Glu
Gly	Lys	Lys	Val 100	Gly	Thr	Phe	Phe	Ser 105	Glu	Val	Lys	Pro	Ala 110	Gly	Pro
Thr	Val	Glu 115	Gln	Gİn	Gly	Glu	Met 120	Ala	Arg	Ser	Gly	Gly 125	Arg	Met	Lev
Ala	Thr 130	Leu	Glu	Pro	Glu	Gln 135	Arg	Ala	Glu	Ile	Ile 140	His	His	Leu	Ala
Asp 145	Leu	Leu	Thr	Asp	Gln 150	Arg	Asp	Glu	Ile	Leu 155	Leu	Ala	Asn	Lys	Lys 160
Asp	Leu	Glu	Glu	Ala 165	Glu	Gly	Arg	Leu	Ala 170	Ala	Pro	Leu	Leu	Lys 175	Arg
Leu	Ser	Leu	Ser 180	Thr	Ser	Lys	Leu	Asn 185	Ser	Leu	Ala	Ile	Gly 190	Leu	Arg
Gln	Ile	Ala 195	Ala	Ser	Ser	Gln	Asp 200	Ser	Val	Gly	Arg	Val 205	Leu	Arg	Arg
Thr	Arg 210	Ile	Ala	Lys	Asn	Leu 215	Glu	Leu	Glu	Gln	Val 220	Thr	Val	Pro	Ile
Gly 225	Val	Leu	Leu	Val	Ile 230	Phe	Glu	Ser	Arg	Pro 235	Asp	Сув	Leu	Pro	Gln 240
Val	Ala	Ala	Leu	Ala 245	Ile	Ala	Ser	Gly	Asn 250	Gly	Leu	Leu	Leu	Lys 255	Gly
Gly	Lys	Glu	Ala 260	Ala	His	Ser	Asn	Arg 265	Ile	Leu	His	Leu	Leu 270	Thr	Gln
3lu	Ala	Leu 275	Ser	Ile	His	Gly	Val 280	Lys	Glu	Ala	Val	Gln 285	Leu	Val	Asn
Chr	Arg 290	Glu	Glu	Val	Glu	Asp 295	Leu	Cys	Arg	Leu	Asp 300	Lys	Met	Ile	Asp

Leu Ile Ile Pro Arg Gly Ser Ser Gln Leu Val Arg Asp Ile Gln Lys 305 310 315 320

Ala Ala Lys Gly Ile Pro Val Met Gly His Ser Glu Gly Ile Cys Ala 325 330 335

His Val Cys Gly Phe Arg Gly Gln Cys 340 345

<210> 1240

<211> 87

<212> PRT

<213> Homo sapiens

<400> 1240

Gly Tyr Cys Phe Ile Ser Thr Ser Arg Thr Pro Lys Glu Thr Ile Trp

1 5 10 15

Val Lys Ala Thr Ser Thr Ala Leu Ala Leu His Arg Phe Leu Glu Phe 20 25 30

Leu Ser Phe Thr Phe Ser Leu Thr Gln His Cys Leu Leu Phe Val Phe 35 40

Val Ala Trp Phe Val Phe Phe Leu Pro Cys Ser Pro Asn Leu Cys Pro 50 60

Asn Ser Phe Gly Leu Met Gln Lys Tyr Leu Cys Gly Arg Glu Glu Leu ·65 70 75 80

Phe Ser Trp Arg Ala Phe Arg 85

<210> 1241

<211> 196

<212> PRT

<213> Homo sapiens

<400> 1241

Arg Ala Gly Ser Pro Ala Ser Pro Ala His Val Ala Trp Pro Pro Ala 1 5 10 15

Pro Thr Trp Ser Arg Ala Leu Pro Arg Val Ala Pro Arg Ser Ser Ser 20 25 30

Arg Arg Gly Arg Arg Tyr Pro Glu Arg Ser Gln Arg Arg Arg Glu Val

35 40 45 Ala Ala Thr Ala Met Pro Lys Asn Lys Gly Lys Gly Lys Asn Arg 55 Arg Arg Gly Lys Asn Glu Asn Glu Ser Glu Lys Arg Glu Leu Val Phe Lys Glu Asp Gly Gln Glu Tyr Ala Gln Val Ile Lys Met Leu Gly Asn 90 Gly Arg Leu Glu Ala Met Cys Phe Asp Gly Val Lys Arg Leu Cys His 100 Ile Arg Gly Lys Leu Arg Lys Lys Val Trp Ile Asn Thr Ser Asp Ile 120 Ile Leu Val Gly Leu Arg Asp Tyr Gln Asp Asn Lys Ala Asp Val Ile 130 Leu Lys Tyr Asn Ala Asp Glu Ala Arg Ser Leu Lys Ala Tyr Gly Glu Leu Pro Glu His Ala Lys Ile Asn Glu Thr Asp Thr Phe Gly Pro Gly 165 170 Asp Asp Asp Glu Ile Gln Phe Asp Asp Ile Gly Asp Asp Asp Glu Asp 185 Ile Asp Asp Ile 195 <210> 1242 <211> 218 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (7) <223> Xaa equals any of the naturally occurring L-amino acids

Ala Val Xaa Phe Lys Asp Xaa Ile Tyr Glu Ile Phe Gln Lys Leu Asn

<211> 173 <212> PRT

<400> 1243

<213> Homo sapiens

5

1				5					10					15	
Thr	Ser	Ile	Gln 20	Val	Val	Leu	Leu	Ser 25	Ala	Thr	Met	Pro	Thr 30	Asp	Va1
Leu	Glu	Val 35	Thr	Lys	Lys	Phe	Met 40	Arg	Asp	Pro	Ile	Arg 45	Ile	Leu	Va]
Lys	Lys 50	Glu	Glu	Leu	Thr	Leu 55	Glu	Gly	Ile	Lys	Gln 60	Phe	Tyr	Ile	Asr
Val 65	Glu	Arg	Glu	Glu	Trp 70	Lys	Leu	Asp	Thr	Leu 75	Cys	Asp	Leu	Tyr	Glu 80
Thr	Leu	Thr	Ile	Thr 85	Gln	Ala	Val	Ile	Phe 90	Leu	Asn	Thr	Arg	Arg 95	Lys
Val	Asp	Trp	Leu 100	Thr	Glu	Lys	Met	His 105	Ala	Arg	Asp	Phe	Thr 110	Val	Ser
Ala	Leu	His 115	Gly	Asp	Met	Asp	Gln 120	Lys	Glu	Arg	Asp	Val 125		Met	Arg
Glu	Phe 130	Arg	Ser	Gly	Ser	Ser 135	Arg	Val	Leu	Ile	Thr 140	Thr	Asp	Leu	Leu
Ala 145	Arg	Gly	Ile	Asp	Val 150	Gln	Gln	Val	Ser	Leu 155	Val	Ile	Asn	Tyr	Asp 160
Leu	Pro	Thr	Asn	Arg 165	Glu	Asn	Tyr	Ile	His 170	Arg	Ile	Gly	Arg	Gly 175	Gly
Arg	Phe	Gly	Arg 180	Lys .	Gly	Val	Ala	Ile 185	Asn	Phe	Val	Thr	Glu 190	Glu	Asp
Lys	Arg	Ile 195	Leu	Arg	Asp	Ile	Glu 200	Thr	Phe	Tyr	Asn	Thr 205	Thr	Val	Glu
Glu	Met 210	Pro	Met	Asn	Val	Ala 215	qeA	Leu	Ile						
<210	> 12	43													

Leu Asp Gly Ser Ala Arg Ala Glu Leu Ala Leu Ser Val Ala Val Asn

Val Ala Pro Gly Arg Leu Cys Ala Gly Arg Tyr Ser Ser Asp Val Gln 25 Glu Met Ile Leu Ser Ser Ala Thr Ala Asp Arg Ile Pro Ile Ala Val 40 Ser Gly Val Arg Gly Met Gly Phe Leu Met Arg His His Ile Glu Thr 55 Gly Gly Gln Leu Pro Ala Lys Leu Ser Ser Leu Phe Val Lys Cys Leu Gln Asn Pro Ser Ser Asp Ile Arg Leu Val Ala Glu Lys Met Ile Trp Trp Ala Asn Lys Asp Pro Leu Pro Pro Leu Asp Pro Gln Ala Ile 105 Lys Pro Ile Leu Lys Ala Leu Leu Asp Asn Thr Lys Asp Lys Asn Thr 120 Val Val Arg Ala Tyr Ser Asp Gln Ala Ile Val Asn Leu Leu Lys Met 135 Arg Gln Gly Glu Glu Val Phe Gln Ser Leu Ser Lys Ile Leu Asp Val 150 155 Ala Ser Leu Glu Val Leu Asn Glu Val Asn Arg Ser Pro <210> 1244 <211> 222 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (17) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (72) ~ <223> Xaa equals any of the naturally occurring L-amino acids <400> 1244 Tyr Ile Lys Ile Tyr Gln Gly Glu Glu Leu Pro His Pro Lys Ser Met

Xaa	Gln	Ala	Thr 20	Ala	Glu	Ala	Asn	Asn 25		Ala	Ala	Val	Ala 30	Thr	Ala
Lys	Asp	Thr 35		Asn	Lys	Lys	Met 40	Glu	Glu	Ile	Cys	Gly 45	Gly	Asp	Lys
Pro	Phe 50	Leu	Ala	Pro	Asn	Asp 55	Leu	Gln	Thr	Lys	His 60	Leu	Gln	Leu	Lys
G1u 65	Glu	Ser	Val	Lys	Leu 70	Phe	Xaa	Gly	Val	Lys 75	Lys	Met	Gly	Gly	Glu 80
Glu	Phe	Ser	Arg	Arg 85	Tyr	Leu	Gln	Gln	Leu 90	Glu	Ser	Glu	Ile	Asp 95	Glu
Leu	Tyr	Ile	Gln 100	Tyr	Ile	Lys	His	Asn 105	Asp	Ser	Lys	Asn	Ile 110	Phe	His
Ala	Ala	Arg 115	Thr	Pro	Ala	Thr	Leu 120	Phe	Val	Val	Ile	Phe 125	Ile	Thr	Tyr
Val	Ile 130	Ala	Gly	Val	Thr	Gly 135	Phe	Ile	Gly	Leu	Asp 140	Ile	Ile	Ala	Ser
Leu 145	Cys	Asn	Met	Ile	Met 150	Gly	Leu	Thr	Leu	Ile 155	Thr	Leu	Cys	Thr	Trp 160
Ala	Tyr	Ile	Arg	Туг 165	Ser	Gly	Glu	Tyr	Arg 170	Glu	Leu	Gly	Ala	Val 175	Ile
Asp	Gln	Val	Ala 180	Ala	Ala	Leu	Trp	Asp 185	Gln	Ala	Leu	Tyr	Lys 190	Leu	Tyr
Ser	Ala	Ala 195	Ala	Thr	His	Arg	His 200	Leu	Tyr	His	Gln	Ala 205	Phe	Pro	Thr
Pro	Lys 210	Ser	Glu	Ser	Thr	Glu 215	Gln	Ser	Glu	Lys	Lys 220	Lys	Met		

<210> 1245

<211> 278

<212> PRT

<213> Homo sapiens

<400> 1245

Ser Ala Glu Asp Val Glu Phe Gln Lys Glu Val Ala Gln Val Arg Lys 1 5 10 15

Arg	Ile	Thr	Gln 20		Lys	Lys	Gln	Glu 25		Leu	Thr	Pro	Gly 30	Val	Va1
Tyr	Val	Arg 35		Leu	Pro	Asn	Leu 40	Leu	Asp	Glu	Thr	Gln 45	Ile	Phe	Sei
Tyr	Phe 50		Gln	Phe	Gly	Thr 55		Thr	Arg	Phe	Arg 60	Leu	Ser	Arg	Sei
Lys 65	Arg	Thr	Gly	Asn	Ser 70	Lys	Gly	Tyr	Ala	Phe 75	Val	Glu	Phe	Glu	Ser 80
Glu	Asp	Val	Ala	Lys 85	Ile	Val	Ala	Glu	Thr 90	Met	Asn	Asn	Tyr	Leu 95	
Gly	Glu	Arg	Leu 100	Leu	Glu	Cys	His	Phe 105	Met	Pro	Pro	Glu	Lys 110	Val	His
Lys	Glu	Leu 115	Phe	Lys	Asp	Trp	Asn 120	Ile	Pro	Phe	Lys	Gln 125	Pro	Ser	Tyr
Pro	Ser 130	Val	Lys	Arg	Tyr	Asn 135	Arg	Asn	Arg	Thr	Leu 140	Thr	Gln	Lys	Leu
Arg 145	Met	Glu	Glu	Arg	Phe 150	Lys	Lys	Lys	Glu	Arg 155	Leu	Leu	Arg	Lys	Lys 160
Leu	Ala	Lys	Lys	Gly 165	Ile	Asp	туг	Asp	Phe 170	Pro	Ser	Leu	Ile	Leu 175	Gln
Lys	Thr	Glu	Ser 180	Ile	Ser	Lys	Thr	Asn 185	Arg	Gln	Thr	Ser	Thr 190	Lys	Gly
Gln	Val	Leu 195	Arg	Lys	Lys	Lys	Lys 200	Lys	Val	Ser	Gly	Thr 205	Leu	Asp	Thr
Pro	Glu 210	Lys	Thr	Val	Asp	Ser 215	Gln	Gly	Pro	Thr	Pro 220	Val	Cys	Thr	Pro
Thr 225	Phe	Leu	Glu	Arg	Arg 230	Lys	Ser	Gln	Val	Ala 235	Glu	Leu	Asn	Asp	Asp 240
Asp	Lys	Asp	Asp	Glu 245	Ile	Val	Phe	Lys	Gln 250	Pro	Ile	Ser	Cys	Val 255	Lys
Glu	Glu	Ile	Gln 260	Glu	Thr	Gln	Thr	Pro 265	Thr	His	Ser	Arg	Lys 270	Lys	Arg
Arg	Arg	Ser	Ser	Asn	Gln										

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<210> 1246
<211> 121
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (100)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1246
Ser Pro Pro Pro Leu Ser Leu Ile Leu Leu Ser Pro Ile Lys Ala Lys
Tyr Gly Leu Thr Thr Ser Pro Lys Ser Val Leu Arg Pro Ser Leu Cys
Leu Cys Ala Leu Leu Gly Val Ser Gln Arg Ser Gly Gln Asp Cys Ala
                            40
Gly Pro Ala Ser Pro Cys Ala Ser Gln Glu His Arg Gln Gly Val Leu
                         55
Val Ala Val Ala Gly His Leu Ser Pro Ser Ser Leu Leu Asn Val Leu
Thr Ala Arg Gly Asn Gly Val Ser Phe Pro Thr Lys Lys Pro Leu Leu
                 85
Tyr Ile Phe Xaa Leu Gln Ser His Arg Leu Gln Thr Thr Leu Leu Phe
                                105
Phe Met Asp Phe Ser Ala His Phe Arg
       115
<210> 1247
<211> 36
<212> PRT
<213> Homo sapiens
<400> 1247
Ile Phe His Arg Val Leu Leu Cys Asp Leu Asn Phe Ser Leu Gly Pro
                 5
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Ala Ser Asp Ile Val Gly Gly Leu Ser Trp Phe Gln Glu Ile Arg Leu

Ala Phe Ser Ser 35

<210> 1248

<211> 184

<212> PRT

<213> Homo sapiens

<400> 1248

Trp Ile Pro Arg Ala Cys Arg Glu Phe Gly Thr Arg Phe Gly Gly Val
1 5 10 15

Thr Arg Gly Phe Asn Met Arg Ile Glu Lys Cys Tyr Phe Cys Ser Gly 20 25 30

Pro Ile Tyr Pro Gly His Gly Met Met Phe Val Arg Asn Asp Cys Lys 35 40 45

Val Phe Arg Phe Cys Lys Ser Lys Cys His Lys Asn Phe Lys Lys Lys 50 55

Arg Asn Pro Arg Lys Val Arg Trp Thr Lys Ala Phe Arg Lys Ala Ala 65 70 75 80

Gly Lys Glu Leu Thr Val Asp Asn Ser Phe Glu Phe Glu Lys Arg Arg 85 90 95

Asn Glu Pro Ile Lys Tyr Gln Arg Glu Leu Trp Asn Lys Thr Ile Asp 100 105 110

Ala Met Lys Arg Val Glu Glu Ile Lys Gln Lys Arg Gln Ala Lys Phe 115 120 125

Ile Met Asn Arg Leu Lys Lys Asn Lys Glu Leu Gln Lys Val Gln Asp 130 135 140

Ile Lys Glu Val Lys Gln Asn Ile His Leu Ile Arg Ala Pro Leu Ala 145 150 155 160

Gly Lys Gly Lys Gln Leu Glu Glu Lys Met Val Gln Gln Leu Gln Glu 165 170 175

Asp Val Asp Met Glu Asp Ala Pro 180

<210> 1249

<211> 188

<21	2> P	RT													
<21	3> н	omo	sapi	ens											
<22	1> S 2> (104)	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
<40	0> 1	249													
Gly 1	Cys	Pro	Ala	His 5	Ser	Pro	Gly	Ser	Ala 10	Lys	Arg	Trp	Thr	Gln 15	Ala
Ala	Met	Ser	Arg 20	Pro	Arg	Met	Arg	Leu 25	Val	Val	Thr	Ala	Asp 30	Asp	Phe
Gly	Tyr	Cys 35	Pro	Arg	Arg	Asp	Glu 40	Gly	Ile	Val	Glu	Ala 45	Phe	Leu	Ala
Gly	Ala 50	Val	Thr	Ser	Val	Ser 55	Leu	Leu	Val	Asn	Gly 60	Ala	Ala	Thr	Glu
Ser 65	Ala	Ala	Glu	Leu	Ala 70	Arg	Arg	His	Ser	Ile 75	Pro	Thr	Gly	Leu	His 80
Ala	Asn	Leu	Ser	Glu 85	Gly	Arg	Pro	Val	Gly 90	Pro	Ala	Arg	Arg	Gly 95	Ala
Ser	Ser	Leu	Leu 100	Gly	Pro	Glu	Xaa	Phe 105	Phe	Leu	Gly	Lys	Met 110	Gly	Phe
Arg	Glu	Ala 115	Val	Ala	Ala	Gly	Asp 120	Val	Asp	Leu	Pro	Gln 125	Val	Arg	Ser
Arg	Ser 130	Tyr	Arg	Arg	Met	Leu 135	Ala	Arg	Thr	Pro	Arg 140	Ala	Pro	Pro	Gly
Gly 145	Thr	Val	Arg	Pro	Leu 150	Glu	Leu	Ala	Val	Asp 155	Asp	Phe	Arg	Ile	Gln 160
Thr	Leu	Glu	Pro	Ser	His	Gly	Ser	Thr	Arg	Arg	Val	Ser	Ser	Ala	Ala

<210> 1250

. .

<211> 201

<212> PRT

<213> Homo sapiens

165

180 185

Thr Pro Gly Arg Ser Arg Cys Leu Ser Leu Ala Leu

<220															
	> S														
	!> (:	-													
<223	l> X	aa e	quals	any	, of	the	nati	ırall	Ly o	curi	ring	L-ar	nino	acio	is
<220)>														
<221	.> s:	ITE													
	!> (!														
<223	8> X	aa e	quals	s any	of	the	natu	ıral	Ly o	ccur	ring	L-ar	nino	acid	is
<220)>														
<221	> s	ITE													
<222	!> (97)													
<223	8> X	aa e	quals	any	of	the	natı	ırall	Ly o	curi	cing	L-ar	nino	acio	ls
<220															
	.> S														
	-	101)										•			
<223	s> x	aa e	quals	s any	Ot	the	nati	ıraı	rà oc	ccur	ring	L-ar	nıno	acı	15
<400)> 1:	250													
			Leu	Glu	Ile	Tvr	Glu	Ala	Val	Thr	Ser	Pro	Gln	Glv	Pro
1	2,0		200	,5		-1-			10					15	
Ala	Met	Thr	Trp	Ser	Met	Phe	Ala	Val	Gly	Trp	Met	Glu	Leu	Lys	Asp
			20					25					30		
															_
Ala	Cys		Xaa	Arg	Gly	Leu		Asp	Arg	Ser	Phe		Asn	Met	Ala
		35					40					45			
-1	D	5 5-	T	**- 3	m	mh	~ 1		230	3	~1··	Co=	C1	N1-	1703
JIU	50	Pne	Lys	val	Trp	55	GIU	Asn	Ala	Asp	60	ser	GIŞ	ALG	Val
	20					23					00				
Asn	Phe	Leu	Thr	Gly	Met	Gly	Gly	Phe	Leu	Gln	Ala	Val	Val	Phe	Gly
65				•	70	-	•			75					80
Cys	Thr	Gly	Phe	Arg	Val	Ser	Val	Ser	Gly	Ile	Phe	Tyr	Gln	Gly	Xaa
				85					90					95	
Kaa	Leu	Asn	Phe	Xaa	Phe	Ser	Glu		Ser	Val	Thr	Val		Val	Thr
			100					105					110		
			61	D			D	***	T 011	~1	21-	C1	T 011	m	Dwa
Ата	Arg		Gly	PLO	Trp	Ala		HIS	Leu	GIU	ALA	125	ren	тгр	PIO
		115					120					123			
Ser	Gln	Ser	Arg	Leu	Ser	Lev	Leu	Pro	Glv	His	Lvs	Val	Ser	Phe	Pro
	130		7			135			1		140				
Arg	Ser	Ala	Gly	Arg	Ile	Gln	Met	Ser	Pro	Pro	Lys	Leu	Pro	Gly	Ser
145					150					155					160

Ser Ser Ser Glu Phe Pro Gly Arg Thr Phe Ser Asp Val Arg Asp Pro 165 170 175

Leu Gln Ser Pro Leu Trp Val Thr Leu Gly Ser Ser Ser Pro Thr Glu 180 185 190

Ser Leu Thr Val Asp Pro Ala Ser Glu 195 200

<210> 1251

<211> 266

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (16)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1251

Ser Val Gly Ser Val Ala Ala Ala Thr Arg Thr Gly Pro Val Ser Xaa 1 5 10 15

Lys Lys Phe Arg Glu Ala Ser Trp Arg Phe Thr Phe Tyr Leu Ile Ala 20 25 30

Phe Ile Ala Gly Met Ala Val Ile Val Asp Lys Pro Trp Phe Tyr Asp 35 40 45

Met Lys Lys Val Trp Glu Gly Tyr Pro Ile Gln Ser Thr Ile Pro Ser 50 55 60

Gln Tyr Trp Tyr Tyr Met Ile Glu Leu Ser Phe Tyr Trp Ser Leu Leu 65 70 75 80

Phe Ser Ile Ala Ser Asp Val Lys Arg Lys Asp Phe Lys Glu Gln Ile 85 90 95

Ile His His Val Ala Thr Ile Ile Leu Ile Ser Phe Ser Trp Phe Ala 100 105 110

Asn Tyr Ile Arg Ala Gly Thr Leu Ile Met Ala Leu His Asp Ser Ser 115 120 125

Asp Tyr Leu Leu Glu Ser Ala Lys Met Phe Asn Tyr Ala Gly Trp Lys 130 135 140

Asn Thr Cys Asn Asn Ile Phe Ile Val Phe Ala Ile Val Phe Ile Ile

145					150					155					160
Thr	Arg	Leu	Val	Ile 165	Leu	Pro	Phe	Trp	Ile 170	Leu	His	Cys	Thr	Leu 175	Val
Tyr	Pro	Leu	Glu 180	Leu	Tyr	Pro	Ala	Phe 185	Phe	Gly	Туг	Tyr	Phe 190	Phe	Asn
Ser	Met	Met 195	Gly	Val	Leu	Gln	Leu 200	Leu	His	Ile	Phe	Trp 205	Ala	Tyr	Leu
Ile	Leu 210	Arg	Met	Ala	His	Lys 215	Phe	Ile	Thr	Gly	Lys 220	Leu	Val	Glu	Asp
Glu 225	Arg	Ser	Asp	Arg	Glu 230	Glu	Thr	Glu	Ser	Ser 235	Glu	Gly	Glu	Glu	Ala 240
Ala	Ala	Gly	Gly	Gly 245	Ala	Lys	ser	Arg	Pro 250	Leu	Ala	Asn	Gly	His 255	Pro
Ile	Leu	Asn	Asn 260	Asn	His	Arg	Lys	Asn 265	Asp						
<21 <21	0> 12 1> 10 2> PI 3> Ho	63	sapie	ens											
	0> 12 Met		Thr	Asn 5	Lys	Cys	Ala	Ser	Gln 10	Ala	Gly	Met	Thr	Ala 15	туг
Gly	Thr	Arg	Arg 20	His	Leu	Tyr	Asp	Pro 25	Lys	Met	Gln	Thr	Asp 30	Lys	Pro
Phe	Asp	Gln 35	Thr	Thr	Ile	Ser	Leu 40	Gln	Met	Gly	Thr	Asn 45	Lys	Gly	Ala
Ser	Gln 50	Ala	Gly	Met	Leu	Ala 55	Pro	Gly	Thr	Arg	Arg 60	Asp	Ile	Tyr	Asp
Gln 65	Lys	Leu	Thr	Leu	Gln 70	Pro	Val	Asp	Asn	Ser 75	Thr	Ile	Ser	Leu	Gln 80
Met	Gly	Thr	Asn	Lys 85	Val	Ala	Ser	Gln	Lys 90	Gly	Met	Ser	Val	Tyr 95	Gly
Leu	Gly	Arg	Gln 100		туг	Asp	Pro	Lys 105		Cys	Ala	Ala	Pro 110	Thr	Glu

Pro Val Ile His Asn Gly Ser Gln Gly Thr Gly Thr Asn Gly Ser Glu Ile Ser Asp Ser Asp Tyr Gln Ala Glu Tyr Pro Asp Glu Tyr His Gly 135 Glu Tyr Gln Asp Asp Tyr Pro Arg Asp Tyr Gln Tyr Ser Asp Gln Gly 150 155 Ile Asp Tyr <210> 1253 <211> 298 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (109) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1253 Leu Glu Glu Thr Pro Cys Leu Arg Thr Ala Val Ala Cys Glu Gln Arg Asp Pro Gly Thr Glu Ser Gln Pro Arg Arg Cys Cys Arg Arg Arg 25 Pro Glu Thr Ala Glu Pro Val Arg Pro Pro Pro Pro Pro Thr Pro Asp 40 Thr Glu His Pro Val Met Asp Lys Asn Glu Leu Val Gln Lys Ala Lys 55 Leu Ala Glu Gln Ala Glu Arg Tyr Asp Asp Met Ala Ala Cys Met Lys Ser Val Thr Glu Gln Gly Ala Glu Leu Ser Asn Glu Glu Arg Asn Leu Leu Ser Val Ala Tyr Lys Asn Val Val Gly Ala Arg Xaa Ser Ser Trp 100 105 Arg Val Val Ser Ser Ile Glu Gln Lys Thr Glu Gly Ala Glu Lys Lys 120 Gln Gln Met Ala Arg Glu Tyr Arg Glu Lys Ile Glu Thr Glu Leu Arg WO 00/55350 PCT/US00/05882

1276

130 135 140 Asp Ile Cys Asn Asp Val Leu Ser Leu Leu Glu Lys Phe Leu Ile Pro 150 155 Asn Ala Ser Gln Ala Glu Ser Lys Val Phe Tyr Leu Lys Met Lys Gly 170 165 Asp Tyr Tyr Arg Tyr Leu Ala Glu Val Ala Ala Gly Asp Asp Lys Lys 185 Gly Ile Val Asp Gln Ser Gln Gln Ala Tyr Gln Glu Ala Phe Glu Ile 200 195 Ser Lys Lys Glu Met Gln Pro Thr His Pro Ile Arg Leu Gly Leu Ala Leu Asn Phe Ser Val Phe Tyr Tyr Glu Ile Leu Asn Ser Pro Glu Lys 235 Ala Cys Ser Leu Ala Lys Thr Ala Phe Asp Glu Ala Ile Ala Glu Leu 250 245 Asp Thr Leu Ser Glu Glu Ser Tyr Lys Asp Ser Thr Leu Ile Met Gln 265 Leu Leu Arg Asp Asn Leu Thr Leu Trp Thr Ser Asp Thr Gln Gly Asp 275 280 Glu Ala Glu Ala Gly Glu Gly Glu Asn 290 <210> 1254 <211> 173 <212> PRT <213> Homo sapiens <400> 1254 Ser Pro Ala Arg Pro Leu Ile Arg Ser Asp Lys Met Lys Glu Thr Ile Met Asn Gln Glu Lys Leu Ala Lys Leu Gln Ala Gln Val Arg Ile Gly 25 Gly Lys Gly Thr Ala Arg Arg Lys Lys Lys Val Val His Arg Thr Ala 40 Thr Ala Asp Asp Lys Lys Leu Gln Phe Ser Leu Lys Lys Leu Gly Val 55

Asn Asn Ile Ser Gly Ile Glu Glu Val Asn Met Phe Thr Asn Gln Gly 65 70 75 80

Thr Val Ile His Phe Asn Asn Pro Lys Val Gln Ala Ser Leu Ala Ala 85 90 95

Asn Thr Phe Thr Ile Thr Gly His Ala Glu Thr Lys Gln Leu Thr Glu 100 105 110

Met Leu Pro Ser Ile Leu Asn Gln Leu Gly Ala Asp Ser Leu Thr Ser 115 120 125

Leu Arg Arg Leu Ala Glu Ala Leu Pro Lys Gln Ser Val Asp Gly Lys
130 135 140

Ala Pro Leu Ala Thr Gly Glu Asp Asp Asp Glu Val Pro Asp Leu 145 150 155 160

Val Glu Asn Phe Asp Glu Ala Ser Lys Asn Glu Ala Asn 165 170

<210> 1255

<211> 66

<212> PRT

<213> Homo sapiens

<400> 1255

Leu Cys Cys Pro Phe His Ile Lys Glu Leu Leu Thr Thr Lys Ala Ala 1 5 10 15

Pro Ala Phe Pro Ile Cys Leu Ser Ile Trp Leu Ala Gly Lys Glu Arg 20 25 30

Thr Cys Met Leu Val Lys Glu Glu Val Gly Trp Lys Lys Trp Gly Gly
35 40 45

Thr Thr Val Lys Ser Arg Val Lys Pro Ser Trp Pro Lys Val Ser Cys
50 55 60

Arg Leu 65

<210> 1256

<211> 389

<212> PRT

<213> Homo sapiens

<400> 1256

Ala 1	Glu	Ala	Gly	Pro 5	Gly	Ala	Arg	Ala	Ala 10	Ala	Ala	Met	Ala	Ile 15	Lys
Phe	Leu	Glu	Val 20	Ile	Lys	Pro	Phe	Cys 25	Val	Ile	Leu	Pro	Glu 30	Ile	Gln
Lys	Pro	Glu 35	Arg	Lys	Ile	Gln	Phe 40	Lys	Glu	Lys	Val	Leu 45	Trp	Thr	Ala
	50					Leu 55					60				
Ile 65	Met	Ser	Ser	Asp	Ser 70	Ala	Asp	Pro	Phe	Tyr 75	Trp	Met	Arg	Val	Ile 80
Leu	Ala	Ser	Asn	Arg 85	Gly	Thr	Leu	Met	Glu 90	Leu	Gly	Ile	Ser	Pro 95	Ile
Val	Thr	Ser	Gly 100	Leu	Ile	Met	Gln	Leu 105	Leu	Ala	Gly	Ala	Lys 110	Ile	Ile
Glu	Val	Gly 115	Asp	Thr	Pro	Lys	Asp 120	Arg	Ala	Leu	Phe	Asn 125	Gly	Ala	Gln
Lys	Leu 130	Phe	Gly	Met	Ile	11e 135	Thr	Ile	Gly	Gln	Ser 140	Ile	Val	Tyr	Val
Met 145	Thr	Gly	Met	Tyr	Gly 150	Asp	Pro	Ser	Glu	Met 155	Gly	Ala	Gly	Ile	Cys 160
Leu	Leu	Ile	Thr	Ile 165	Gln	Leu	Phe	Val	Ala 170	Gly	Leu	Ile	Val	Leu 175	Leu
Leu	Asp	Glu	Leu 180	Leu	Gln	Lys	Gly	Туг 185	Gly	Leu	Gly	Ser	Gly 190	Ile	Ser
Leu	Phe	Ile 195	Ala	Thr	Asn	Ile	Cys 200	Glu	Thr	Ile	Val	Trp 205	Lys	Ala	Phe
Ser	Pro 210	Thr	Thr	Val	Asn	Thr 215	Gly	Arg	Gly	Met	Glu 220	Phe	Glu	Gly	Ala
Ile 225	Ile	Ala	Leu	Phe	His 230	Leu	Leu	Ala	Thr	Arg 235	Thr	Asp	Lys	Val	Arg 240
Ala	Leu	Arg	Glu	Ala 245	Phe	Tyr	Arg	Gln	Asn 250	Leu	Pro	Asn	Leu	Met 255	Asn
Leu	Ile	Ala	Thr	Ile	Phe	Val	Phe	Ala	Val	Val	Ile	Tyr	Phe	Gln	Gly

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1279

270 260 265 Phe Arg Val Asp Leu Pro Ile Lys Ser Ala Arg Tyr Arg Gly Gln Tyr 280 Asn Thr Tyr Pro Ile Lys Leu Phe Tyr Thr Ser Asn Ile Pro Ile Ile 295 Leu Gln Ser Ala Leu Val Ser Asn Leu Tyr Val Ile Ser Gln Met Leu 315 Ser Ala Arg Phe Ser Gly Asn Leu Leu Val Ser Leu Leu Gly Thr Trp 325 330 Ser Asp Thr Ser Ser Gly Gly Pro Ala Arg Ala Tyr Pro Val Gly Gly 345 Leu Cys Tyr Tyr Leu Ser Pro Pro Trp Ser Met Asn Ser Thr Gly Thr 360 Ser Pro Gln Pro Arg Pro Leu Val Gly Cys Ala Ser Gly Pro Ser Arg 375 Ser Trp Leu Thr Ser <210> 1257 <211> 191 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1257 Gly Xaa Pro Ser Ser Ser Arg Ala His Ser Pro Met Ile Ala Val Gly Ser Asp Asp Ser Ser Pro Asn Ala Met Ala Lys Val Gln Ile Phe Glu Tyr Asn Glu Asn Thr Arg Lys Tyr Ala Lys Ala Glu Thr Leu Met Thr 40 Val Thr Asp Pro Val His Asp Ile Ala Phe Ala Pro Asn Leu Gly Arg

55

Ser Phe His Ile Leu Ala Ile Ala Thr Lys Asp Val Arg Ile Phe Thr 75 65 Leu Lys Pro Val Arg Lys Glu Leu Thr Ser Ser Gly Gly Pro Thr Lys Phe Glu Ile His Ile Val Ala Gln Phe Asp Asn His Asn Ser Gln Val 105 Trp Arg Val Ser Trp Asn Ile Thr Gly Thr Val Leu Ala Ser Ser Gly Asp Asp Gly Cys Val Arg Leu Trp Lys Ala Asn Tyr Met Asp Asn Trp 135 Lys Cys Thr Gly Ile Leu Lys Gly Asn Gly Ser Pro Val Asn Gly Ser 150 Ser Gln Gln Gly Thr Ser Asn Pro Ser Leu Gly Ser Asn Ile Pro Ser 165 Leu Gln Asn Ser Leu Asn Gly Ser Ser Ala Gly Arg Lys His Ser 185 <210> 1258 <211> 458 <212> PRT <213> Homo sapiens <400> 1258 Pro Gly Ala Arg His Gly Ser Ala Ser Ala Pro Thr Leu Phe Pro Leu Val Ser Cys Glu Asn Ser Pro Ser Asp Thr Ser Ser Val Ala Val Gly 20 Cys Leu Ala Gln Asp Phe Leu Pro Asp Ser Ile Thr Phe Ser Trp Lys 40 Tyr Lys Asn Asn Ser Asp Ile Ser Ser Thr Arg Gly Phe Pro Ser Val 55 50 Leu Arg Gly Gly Lys Tyr Ala Ala Thr Ser Gln Val Leu Leu Pro Ser Lys Asp Val Met Gln Gly Thr Asp Glu His Val Val Cys Lys Val Gln

His Pro Asn Gly Asn Lys Glu Lys Asn Val Pro Leu Pro Val Ile Ala

			100					105					110		
Glu	Leu	Pro 115	Pro	Lys	Val	Ser	Val 120	Phe	Val	Pro	Pro	Arg 125	Asp	Gly	Phe
Phe	Gly 130		Pro	Arg	Lys	Ser 135	Lys	Leu	Ile	Суз	Gln 140	Ala	Thr	Gly	Phe
Ser 145	Pro	Arg	Gln	Ile	Gln 150	Val	Ser	Trp	Leu	Arg 155		Gly	Lys	Gln	Val 160
Gly	Ser	Gly	Val	Thr 165	Thr	Asp	Gln	Val	Gln 170	Ala	Glu	Ala	Lys	Glu 175	Ser
Gly	Pro	Thr	Thr 180	Tyr	Lys	Val	Thr	Ser 185	Thr	Leu	Thr	Ile	Lys 190	Glu	Ser
Asp	Trp	Leu 195	Ser	Gln	Ser	Met	Phe 200	Thr	Cys	Arg	Val	Asp 205	His	Arg	Gly
Leu	Thr 210	Phe	Gln	Gln	Asn	Ala 215	Ser	Ser	Met	Суз	Val 220	Pro	Asp	Gln	Asp
Thr 225	Ala	Ile	Arg	Val	Phe 230	Ala	Ile	Pro	Pro	Ser 235	Phe	Ala	Ser	Ile	Phe 240
Leu	Thr	Lys	Ser	Thr 245	Lys	Leu	Thr	Cys	Leu 250	Val	Thr	Asp	Leu	Thr 255	Thr
Tyr	Asp	Ser	Val 260	Thr	Ile	Ser	Trp	Thr 265	Arg	Gln	Asn	Gly	Glu 270	Ala	Val
Lys	Thr	His 275	Thr	Asn	Ile	Ser	Glu 280	Ser	His	Pro	Asn	Ala 285	Thr	Phe	Ser
Ala	Val 290	Gly	Glu	Ala	Ser	Ile 295	Суз	Glu	Asp	Asp	Trp 300	Asn	Ser	Gly	Glu
Arg 305	Phe	Thr	Cys	Thr	Val 310	Thr	His	Thr	Asp	Leu 315	Pro	Ser	Pro	Leu	Lys 320
Gln	Thr	Ile	Ser	Arg 325	Pro	Lys	Gly	Val	Ala 330	Leu	His	Arg	Pro	Asp 335	Val
Туг	Leu	Leu	Pro 340	Pro	Ala	Arg	Glu	Gln 345	Leu	Asn	Leu	Arg	Glu 350	Ser	Ala
Thr	Ile	Thr 355	Cys	Leu	Val	Thr	Gly 360	Phe	Ser	Pro	Ala	Asp 365	Val	Phe	Val
Gln	Trp	Met	Gln	Arg	Gly	Gln	Pro	Leu	Ser	Pro	Glu	Lys	Tyr	Val	Thr

370 375 380 Ser Ala Pro Met Pro Glu Pro Gln Ala Pro Gly Arg Tyr Phe Ala His 385 390 Ser Ile Leu Thr Val Ser Glu Glu Glu Trp Asn Thr Gly Glu Thr Tyr Thr Cys Val Val Ala His Glu Ala Leu Pro Asn Arg Val Thr Glu Arg 425 Thr Val Asp Lys Ser Thr Gly Lys Pro Thr Leu Tyr Asn Val Ser Leu 440 Val Met Ser Asp Thr Ala Gly Thr Cys Tyr 450 455 <210> 1259 <211> 247 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (25) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1259 Ala Gly Pro Ala Pro Glu Glu Pro Arg Gly Gly Ala Ala Ala Arg Trp 5 10 Asp Cys Gln Pro Cys Gln Ala Ala Xaa Val Val Glu Asn Ser Ala Gln Arg Val Ile His Leu Ala Gly Gln Trp Glu Lys His Arg Val Pro Leu 40 Leu Ala Glu Tyr Arg His Leu Arg Lys Leu Gln Asp Cys Arg Glu Leu 50 Glu Ser Ser Arg Arg Leu Ala Glu Ile Gln Glu Leu His Gln Ser Val Arg Ala Ala Ala Glu Glu Ala Arg Arg Lys Glu Glu Val Tyr Lys Gln 85 90 Leu Met Ser Glu Leu Glu Thr Leu Pro Arg Asp Val Ser Arg Leu Ala 100 105

Tyr Thr Gln Arg Ile Leu Glu Ile Val Gly Asn Ile Arg Lys Gln Lys 115 120 125

Glu Glu Ile Thr Lys Ile Leu Ser Asp Thr Lys Glu Leu Gln Lys Glu 130 135 140

Ile Asn Ser Leu Ser Gly Lys Leu Asp Arg Thr Phe Ala Val Thr Asp 145 150 155 160

Glu Leu Val Phe Lys Asp Ala Lys Lys Asp Asp Ala Val Arg Lys Ala 165 170 175

Tyr Lys Tyr Leu Ala Ala Leu His Glu Asn Cys Ser Gln Leu Ile Gln 180 185 190

Thr Ile Glu Asp Thr Gly Thr Ile Met Arg Glu Val Arg Asp Leu Glu 195 200 205

Glu Gln Ile Glu Thr Glu Leu Gly Lys Lys Thr Leu Ser Asn Leu Glu 210 215 220

Lys Ile Arg Glu Asp Tyr Arg Ala Leu Arg Gln Glu Asn Ala Gly Leu 225 230 235 240

Leu Gly Arg Val Arg Glu Ala 245

<210> 1260

<211> 62

<212> PRT

<213> Homo sapiens

<400> 1260

Val Gly Ile Lys Trp Ile Glu Glu Ala Val Leu Cys Ala Asn Val Ser 1 5 10 15

Phe Ala Ser Asp Arg Tyr Leu Phe Val Ile Arg Arg Val Ala Ser Phe 20 25 30

His Leu Gly Ala Glu Asn Ser Arg Gln Leu Leu Thr Asp Lys Phe Asn $35 \hspace{1cm} 40 \hspace{1cm} 45$

Leu His Leu Gln Tyr Cys Met Leu Gly Ile Ser Ala Tyr Phe
50 . . . 55 60

<210> 1261

<211> 243

<212> PRT <213> Homo sapiens <220> <221> SITE <222> (76) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (210) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (226) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1261 Gln Glu Arg Pro Gly Asn Phe Tyr Val Ser Ser Glu Ser Ile Arg Lys Gly Pro Pro Val Arg Pro Trp Arg Asp Arg Pro Gln Ser Ser Ile Tyr Asp Pro Phe Ala Gly Met Lys Thr Pro Gly Gln Arg Gln Leu Ile Thr 40 Leu Gln Glu Gln Val Lys Leu Gly Ile Val Asn Val Asp Glu Ala Val 50 55 Leu His Phe Lys Glu Trp Gln Leu Asn Gln Lys Xaa Arg Ser Glu Ser 75 Phe Arg Phe Gln Glu Asn Leu Lys Arg Leu Arg Asp Ser Ile Thr 90 Arg Arg Gln Arg Glu Lys Gln Lys Ser Gly Lys Gln Thr Asp Leu Glu Ile Thr Val Pro Ile Arg His Ser Gln His Leu Pro Ala Lys Val Glu 120 Phe Gly Val Tyr Glu Ser Gly Pro Arg Lys Ser Val Ile Pro Pro Arg 130 135 Thr Glu Leu Arg Arg Gly Asp Trp Lys Thr Asp Ser Thr Ser Ser Thr 145 150 155 Ala Ser Ser Thr Ser Asn Arg Ser Ser Thr Arg Ser Leu Leu Ser Val 170

Ser Ser Gly Met Glu Gly Asp Asn Glu Asp Asn Glu Val Pro Glu Val 180 185 190

Thr Arg Ser Arg Ser Pro Gly Pro Pro Gln Val Asp Gly Thr Pro Thr
195 200 205

Met Xaa Leu Glu Arg Pro Pro Arg Val Pro Pro Arg Ala Ala Ser Gln 210 215 220

Arg Xaa Pro Thr Arg Glu Thr Phe His Pro Pro Pro Pro Val Pro Pro 225 230 235 240

Arg Gly Arg

<210> 1262

<211> 75

<212> PRT

<213> Homo sapiens

<400> 1262

Lys Tyr Val Arg Asn Asp Gln Asn Lys Arg Lys Phe Leu Phe Ser Cys
1 10 15

Lys Tyr Phe Ser Ser Val Ile Thr Leu Lys Tyr Lys Leu Lys Tyr Asn 20 25 30

Thr Pro Glu Cys Leu Arg His Asp Leu Asp Phe Lys Cys Val Val Phe 35 40

Ile Glu Lys Lys Leu Ser Thr His Leu Val Phe Gln Glu Asn Leu Lys 50 55 60

Arg Ser Gln Gly Lys Met Ile Cys Met Leu Lys 65 70 75

<210> 1263

<211> 475

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (249)

<223> Xaa equals any of the naturally occurring L-amino acids

	J 7 14														
Arg 1	Thr	Gly	Leu	Gly 5	Arg	Asp	Val	Gly	Ala 10	Gly	Ala	Arg	Arg	Ala 15	Ala
Arg	Суз	Arg	Ala 20	Glu	Ala	Ala	Ala	Ala 25	Val	Gly	Thr	Ala	Arg 30	Ser	Pro
Ala	Leu	Gly 35	Met	Ala	Leu	Leu	Val 40	Leu	Gly	Leu	Val	Ser 45	Cys	Thr	Phe
Phe	Leu 50	Ala	Val	Asn	Gly	Leu 55	туг	Ser	Ser	Ser	Asp 60	Asp	Val	Ile	Glu
Leu 65	Thr	Pro	Ser	Asn	Phe 70	Asn	Arg	Glu	Val	75	Gln	Ser	Asp	Ser	Leu 80
rrp	Leu	Val	Glu	Phe 85	Tyr	Ala	Pro	Trp	Cys 90	Gly	His	Cys	Gln	Arg 95	Leu
Thr	Pro	Glu	Trp 100	Lys	Lys	Ala	Ala	Thr 105	Ala	Leu	Lys	Asp	Val 110	Val	Lys
Val	Gly	Ala 115	Val	Asp	Ala	Asp	Lys 120	His	His	Ser	Leu	Gly 125	Gly	Gln	Tyr
Gly	Val 130	Gln	Gly	Phę	Pro	Thr 135	Ile	Lys	Ile	Phe	Gly 140	Ser	Asn	Lys	Asn
Arg 145	Pro	Glu	Asp	Tyr	Gln 150	Gly	Gly	Arg	Thr	Gly 155	Glu	Ala	Ile	Val	Asp 160
Ala	Ala	Leu	Ser	Ala 165	Leu	Arg	Gln	Leu	Val 170	Lys	Asp	Arg	Leu	Gly 175	Gly
Arg	Ser	Gly	Gly 180	Tyr	Ser	Ser	Gly	Lys 185	Gln	Gly	Arg	Ser	Asp 190	Ser	Ser
Ser	Lys	Lys 195	Asp	Val	Ile	Glu	Leu 200	Thr	Asp	Asp	Ser	Phe 205	Asp	Lys	Asn
Val	Leu 210	Asp	Ser	Glu	Asp ·	Val 215	Trp	Met	Val	Glu	Phe 220	Tyr	Ala	Pro	Trp
Cys 225	Gly	His	Суз	Lys	Asn 230	Leu	Glu	Pro	Glu	Trp 235	Ala	Ala	Ala	Ala	Ser 240
3lu	Val	Lys	Glu	Gln 245	Thr	Lys	Gly	Xaa	Val 250	Lys	Leu	Ala	Ala	Val 255	Asp
Ala	Thr	Val	Asn 260	Gln	Val	Leu	Ala	Ser 265	Arg	Tyr	Gly	Ile	Arg 270	Gly	Phe

Pro Thr Ile Lys Ile Phe Gln Lys Gly Glu Ser Pro Val Asp Tyr Asp 280 Gly Gly Arg Thr Arg Ser Asp Ile Val Ser Arg Ala Leu Asp Leu Phe 295 Ser Asp Asn Ala Pro Pro Pro Glu Leu Leu Glu Ile Ile Asn Glu Asp 315 310 Ile Ala Lys Arg Thr Cys Glu Glu His Gln Leu Cys Val Val Ala Val 330 Leu Pro His Ile Leu Asp Thr Gly Ala Ala Gly Arg Asn Ser Tyr Leu Glu Val Leu Leu Lys Leu Ala Asp Lys Tyr Lys Lys Lys Met Trp Gly 360 Trp Leu Trp Thr Glu Ala Gly Ala Gln Ser Glu Leu Glu Thr Ala Leu 375 380 Gly Ile Gly Gly Phe Gly Tyr Pro Ala Met Ala Ala Ile Asn Ala Arg 385 390 395 Lys Met Lys Phe Ala Leu Leu Lys Gly Ser Phe Ser Glu Gln Gly Ile 410 Asn Glu Phe Leu Arg Glu Leu Ser Phe Gly Arg Gly Ser Thr Ala Pro 425 Val Gly Gly Ala Phe Pro Thr Ile Val Glu Arg Glu Pro Trp Asp 440 Gly Arg Asp Gly Glu Leu Pro Val Glu Asp Asp Ile Asp Leu Ser Asp 455 Val Glu Leu Asp Asp Leu Gly Lys Asp Glu Leu 465 470

<210> 1264

<211> 398

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (28)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1264

His l	Phe	Glu	Arg	Thr 5	Ser	Ser	Lys	Arg	Val 10	Ser	Arg	Ser	Leu	Asp 15	Gly
Ala	Pro	Ile	Gly 20	Val	Met	Asp	Gln	Ser 25	Leu	Met	Xaa	Asp	Phe 30	Pro	Gly
Ala	Ala	Gly 35	Glu	Ile	Ser	Ala	Tyr 40	Gly	Pro	Gly	Leu	Val 45	Ser	Ile	Ala
Val	Val 50	Gln	Asp	Gly	Asp	Gly 55	Arg	Arg	Glu	Val	Arg 60	Ser	Pro	Thr	Lys
Ala 65	Pro	His	Leu	Gln	Leu 70	Ile	Glu	Gly	Lys	Ser 75	Ser	His	Glu	Thr	Leu 80
Asn	Ile	Val	Glu	Glu 85	Lys	Lys	Arg	Ala	Glu 90	Val	Gly	Lys	Asp	Glu 95	Arg
Val	Ile	Thr	Glu 100	Glu	Met	Asn	Gly	Lys 105	Glu	Ile	Ser	Pro	Gly 110	Ser	Gly
Pro	Gly	Glu 115	Ile	Arg	Lys	Val	Glu 120	Pro	Val	Thr	Gln	Lys 125	Asp	Ser	Thr
Ser	Leu 130	Ser	Ser	Glu	Ser	Ser 135	Ser	Ser	Ser	Ser	Glu 140	Ser	Glu	Glu	Glu
Asp 145	Val	Gly	Glu	Tyr	Arg 150	Pro	His	His	Arg	Val 155	Thr	Glu	Gly	Thr	11e
Arg	Glu	Glu	Gln	Glu 165	Tyr	Glu	Glu	Glu	Val 170	Glu	Glu	Glu	Pro	Arg 175	Pro
Ala	Ala	Lys	Val 180	Val	Glu	Arg	Glu	Glu 185	Ala	Val	Pro	Glu	Ala 190	Ser	Pro
Val	Thr	Gln 195	Ala	Gly	Ala	Ser	Val 200	Ile	Thr	Val	Glu	Thr 205	Val	Ile	Glr
3lu	Asn 210	Val	Gly	Ala	Gln	Lys 215	Ile	Pro	Gly	Glu	Lys 220	Ser	Val	His	Glu
31y 225	Ala	Leu	Lys	Gln	Asp 230	Met	Gly	Glu	Glu	Ala 235	Glu	Glu	Glu	Pro	Glr 240
Lys	Val	Asn	Gly	Glu 245	Val	Ser	His	Val	Asp 250	Ile	Asp	Val	Leu	Pro 255	Glr
Ile	Ile	Cys	Сув	Ser	Glu	Pro	Pro	Val	Val	Lys	Thr	Glu	Met	Val	Thr

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265 260 270 Ile Ser Asp Ala Ser Gln Arg Thr Glu Ile Ser Thr Lys Glu Val Pro 280 275 285 Ile Val Gln Thr Glu Thr Lys Thr Ile Thr Tyr Glu Ser Pro Gln Ile 295 300 Asp Gly Gly Ala Gly Gly Asp Ser Gly Thr Leu Leu Thr Ala Gln Thr 310 315 Ile Thr Ser Glu Ser Val Ser Thr Thr Thr Thr His Ile Thr Lys 325 330 Thr Val Lys Gly Gly Ile Ser Glu Thr Arg Ile Glu Lys Arg Ile Val 345 Ile Thr Gly Asp Gly Asp Ile Asp His Asp Gln Ala Leu Ala Gln Ala Ile Arg Glu Ala Arg Glu Gln His Pro Asp Met Ser Val Thr Arg Val Val Val His Lys Glu Thr Glu Leu Ala Glu Glu Gly Glu Asp 390 395 <210> 1265 <211> 207 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (99) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1265 Trp Thr Gly Thr Gly Arg Gly Ala Val Ala Ile Met Ala Asp Pro Asp Pro Arg Tyr Pro Arg Ser Ser Ile Glu Asp Asp Phe Asn Tyr Gly Ser Ser Val Ala Ser Ala Thr Val His Ile Arg Met Ala Phe Leu Arg Lys 35 40 Val Tyr Ser Ile Leu Ser Leu Gln Val Leu Leu Thr Thr Val Thr Ser

55

Thr Val Phe Leu Tyr Phe Glu Ser Val Arg Thr Phe Val His Glu Ser 70 Pro Ala Leu Ile Leu Leu Phe Ala Leu Gly Ser Leu Gly Leu Ile Phe 85 Ala Leu Xaa Leu Asn Arg His Lys Tyr Pro Leu Asn Leu Tyr Leu Leu Phe Gly Phe Thr Leu Leu Glu Ala Leu Thr Val Ala Val Val Thr 115 120 Phe Tyr Asp Val Tyr Ile Ile Leu Gln Ala Phe Ile Leu Thr Thr 135 Val Phe Phe Gly Leu Thr Val Tyr Thr Leu Gln Ser Lys Lys Asp Phe 155 Ser Lys Phe Gly Ala Gly Leu Phe Ala Leu Leu Trp Ile Leu Cys Leu 170 Ser Gly Phe Leu Lys Phe Phe Phe Tyr Ser Glu Ile Met Glu Leu Val 185 Leu Ala Ala Gly Ala Leu Leu Phe Trp Gly Ile His His Leu 195 200 <210> 1266 <211> 289 <212> PRT <213> Homo sapiens

<400> 1266

Ser Arg Asp Pro Asm Gly Trp Trp Arg Arg Leu Arg Val Ser Ala Glu
1 5 10

Leu Ala Met Ala Gln Leu Cys Gly Leu Arg Arg Ser Arg Ala Phe Leu 20 25 30

Ala Leu Leu Gly Ser Leu Leu Leu Ser Gly Val Leu Ala Ala Asp Arg
35 40 45

Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser Lys Val Val Gly Arg
50 60

Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr Asp Gly Ser 65 70 75 80

Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser Asn Asn Tyr

90 95 85 Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val Thr Glu Asn 100 105 Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp Ser Ser Val 120 Pro Ser Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser Ser Asp Met 135 Phe Asn Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr Gly Pro Cys 150 Arg Ala Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys Asn Asn Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg 180 185 Ser Glu Glu Ala Cys Met Leu Arg Cys Phe Arg Gln Gln Glu Asn Pro 200 Pro Leu Pro Leu Gly Ser Lys Val Val Val Leu Ala Gly Leu Phe Val 215 Met Val Leu Ile Leu Phe Leu Gly Ala Ser Met Val Tyr Leu Ile Arg 225 Val Ala Arg Arg Asn Gln Glu Arg Ala Leu Arg Thr Val Trp Ser Ser Gly Asp Asp Lys Glu Gln Leu Val Lys Asn Thr Tyr Val Leu Cys Arg 265 Pro Val Ala Lys Arg Thr Gly Glu Gly Arg Gly Asp Met Cys Asp Phe 280 275

Phe

<210> 1267

<211> 284

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (5)

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<223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (6) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1267 Arg Gly Arg Arg Xaa Xaa Ala Ser Leu Arg Gly Trp Pro Val Arg Arg Gly Met Gly Arg Val Gln Leu Phe Glu Ile Ser Leu Ser His Gly Arg Val Val Tyr Ser Pro Gly Glu Pro Leu Ala Gly Thr Val Arg Val Arg Leu Gly Ala Pro Leu Pro Phe Arg Ala Ile Arg Val Thr Cys Ile Gly 55 Ser Cys Gly Val Ser Asn Lys Ala Asn Asp Thr Ala Trp Val Val Glu Glu Gly Tyr Phe Asn Ser Ser Leu Ser Leu Ala Asp Lys Gly Ser Leu Pro Ala Gly Glu His Ser Phe Pro Phe Gln Phe Leu Leu Pro Ala Thr Ala Pro Thr Ser Phe Glu Gly Pro Phe Gly Lys Ile Val His Gln Val 120 Arg Ala Ala Ile His Thr Pro Arg Phe Ser Lys Asp His Lys Cys Ser 135 Leu Val Phe Tyr Ile Leu Ser Pro Leu Asn Leu Asn Ser Ile Pro Asp 145 150 Ile Glu Gln Pro Asn Val Ala Ser Ala Thr Lys Lys Phe Ser Tyr Lys · 170 Leu Val Lys Thr Gly Ser Val Val Leu Thr Ala Ser Thr Asp Leu Arg Gly Tyr Val Val Gly Gln Ala Leu Gln Leu His Ala Asp Val Glu Asn 200 Gln Ser Gly Lys Asp Thr Ser Pro Val Val Ala Ser Leu Leu Gln Lys 215 Val Ser Tyr Lys Ala Lys Arg Trp Ile His Asp Val Arg Thr Ile Ala WO 00/55350 PCT/US00/05882

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235

230

240

225

Glu Val Glu Gly Ala Gly Val Lys Ala Trp Arg Arg Ala Gln Trp His 250 Glu Gln Ile Leu Val Pro Ala Leu Pro Gln Ser Ala Leu Pro Ala Ala 260 265 Ala Ser Ser Thr Ser Thr Thr Thr Tyr Arg Ser Leu 280 <210> 1268 <211> 254 <212> PRT <213> Homo sapiens <400> 1268 Val Trp Leu Arg Val Glu Asn Val Cys Gln Gly Pro Gly Gln Glu Gly Gly Pro Pro Val Thr Met Val Ser Met Ser Phe Lys Arg Asn Arg Ser Asp Arg Phe Tyr Ser Thr Arg Cys Cys Gly Cys Cys His Val Arg Thr Gly Thr Ile Ile Leu Gly Thr Trp Tyr Met Val Val Asn Leu Leu Met 50 55 Ala Ile Leu Leu Thr Val Glu Val Thr His Pro Asn Ser Met Pro Ala 70 Val Asn Ile Gln Tyr Glu Val Ile Gly Asn Tyr Tyr Ser Ser Glu Arg Met Ala Asp Asn Ala Cys Val Leu Phe Ala Val Ser Val Leu Met Phe 100 105 Ile Ile Ser Ser Met Leu Val Tyr Gly Ala Ile Ser Tyr Gln Val Gly 120 Trp Leu Ile Pro Phe Phe Cys Tyr Arg Leu Phe Asp Phe Val Leu Ser 135 Cys Leu Val Ala Ile Ser Ser Leu Thr Tyr Leu Pro Arg Ile Lys Glu 150 Tyr Leu Asp Gln Leu Pro Asp Phe Pro Tyr Lys Asp Asp Leu Leu Ala 170

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Leu Asp Ser Ser Cys Leu Leu Phe Ile Val Leu Val Phe Phe Ala Leu 185 Phe Ile Ile Phe Lys Ala Tyr Leu Ile Asn Cys Val Trp Asn Cys Tyr 200 Lys Tyr Ile Asn Asn Arg Asn Val Pro Glu Ile Ala Val Tyr Pro Ala 215 Phe Glu Ala Pro Pro Gln Tyr Val Leu Pro Thr Tyr Glu Met Ala Val Lys Met Pro Glu Lys Glu Pro Pro Pro Pro Tyr Leu Pro Ala 245 250 <210> 1269 <211> 67 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (17) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (49) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (52) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (53) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1269 Lys Ser Ile Leu Val Ile Arg Val Tyr Phe Phe Tyr Arg Thr Arg Trp

Xaa Gly Glu Pro Phe Thr Leu Leu Val Lys Leu Asn His Arg Lys

Phe Thr Ile Cys Leu Ser Gln Thr Leu Ala Val Arg Gly Met Val Ala

35 40 45 Xaa Ala Cys Xaa Xaa Pro Ala Cys Trp Gly Gly Pro Ser Trp Gly Gly Leu Pro Glu 65 <210> 1270 <211> 164 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (6) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (10) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (13) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (138) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (152) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (161) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (164) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1270

Gly Ser Pro Gly Thr Xaa Arg Ile Pro Xaa Thr Arg Xaa Glu Thr Cys

1 10 15

Phe Asp Lys Tyr Thr Gly Asn Thr Tyr Arg Val Gly Asp Thr Tyr Glu 20 25 30

Arg Pro Lys Asp Ser Met Ile Trp Asp Cys Thr Cys Ile Gly Ala Gly
35 40

Arg Gly Arg Ile Ser Cys Thr Ile Ala Asn Arg Cys His Glu Gly Gly 50 60

Gln Ser Tyr Lys Ile Gly Asp Thr Trp Arg Arg Pro His Glu Thr Gly
65 70 75 80

Gly Tyr Met Leu Glu Cys Val Cys Leu Gly Asn Gly Lys Gly Glu Trp 85 90 95

Thr Cys Lys Pro Ile Ala Glu Lys Cys Phe Asp His Ala Ala Gly Thr 100 105 110

Ser Tyr Val Val Gly Glu Thr Trp Glu Lys Pro Tyr Gln Gly Trp Met 115 120 125

Met Val Asp Cys Thr Cys Leu Gly Glu Xaa Ser Gly Arg Ile Thr Cys 130 140

Thr Ser Arg Asn Arg Cys Asn Xaa Gln Asp Thr Arg Thr Ser Ile Glu 145 150 155 160

Xaa Glu Thr Xaa

<210> 1271

<211> 363

<212> PRT

<213> Homo sapiens

<400> 1271

Ala Arg Gly Ser Glu Cys Gly Gln Arg Ala Glu Ala Val Ser His Arg
1 5 10 15

Arg Arg Arg Ala Gln Ala Ser Ser Phe Gly Trp Gly Ala Ala Glu

Leu Thr Ser Asp Ile Ser Ala Pro Phe Thr Arg Arg Asn Pro Gly Ala
35 40

Gly Ala Arg Ser Ala Gly Val Thr Met Thr Lys Ala Gly Ser Lys Gly

	50					55					60				
Gly 65		Leu	Arg	Asp	Lys 70		Asp	Gly	Asn	Glu 75		Asp	Leu	Ser	Leu 80
Ser	Asp	Leu	Asn	G1u 85		Pro	Val	Lys	Glu 90		Ala	Ala	Leu	Pro 95	Lys
Ala	Thr	Ile	Leu 100		Leu	Ser	Cys	Asn 105		Leu	Thr	Thr	Leu 110	Pro	Ser
Asp	Phe	Cys 115		Leu	Thr	His	Leu 120		Lys	Leu	Asp	Leu 125		Lys	Asn
Lys	Leu 130	Gln	Gln	Leu	Pro	Ala 135	Asp	Phe	Gly	Arg	Leu 140		Asn	Leu	Gln
His 145	Leu	Asp	Leu	Leu	Asn 150	Asn	Lys	Leu	Val	Thr 155	Leu	Pro	Val	Ser	Phe 160
Ala	Gln	Leu	Lys	Asn 165	Leu	Lys	Trp	Leu	Asp 170	Leu	Lys	Asp	Asn	Pro 175	Leu
Asp	Pro	Val	Leu 180	Ala	Lys	Val	Ala	Gly 185	Asp	Cys	Leu	Asp	Glu 190	Lys	Gln
Суз	Lys	Gln 195	Cys	Ala	Asn	Lys	Val 200	Leu	Gln	His	Met	Lys 205	Ala	Val	Gln
	210		•			215	Gln				220				
225					230		Lys			235					240
Arg	Glu	Leu	Arg	Lys 245	Arg	Glu	Lys	Ala	Glu 250	Glu	Lys	Glu	Arg	Arg 255	Arg
			260			_	Ala	265					270	-	
Pro	Lys	Lys 275	Glu	Ala	Asn	Gln	Ala 280	Pro	Lys	Ser	Lys	Ser 285	Gly	Ser	Arg
	290					295	Lys			•	300	•			
305					310		Leu			315					320
Ala	Cys	Arg	Val	Thr	Glu	Leu	Gln	Gln	Gln	Pro	Leu	Cys	Thr	Ser	Val

325 330 335 Asn Thr Ile Tyr Asp Asn Ala Val Gln Gly Leu Arg Arg His Glu Ile 340 345 Leu Gln Trp Val Leu Gln Thr Asp Ser Gln Gln 360 <210> 1272 <211> 144 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (112) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (116) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (124) <223> Xaa equals any of the naturally occurring L-amino acids Gly Leu Val Met Ala Pro Ile Ala Cys Leu Leu Pro Ala Phe Ser Ser Ala Pro Glu Ala Met His Pro Trp Glu Leu Phe Val Lys Tyr Tyr His 25 Ala Lys Asn Gly Arg Ala Tyr Val Glu Ser Pro Ala Arg Lys Leu Ser Gln Ser Phe Ala Leu Pro Val Thr Gly Gly Thr Val Val Thr Pro Lys 55 Gln Ser Leu Leu Thr Ala Ile His Met Val Leu Thr Glu His Asp Pro 65 Phe Lys Arg Ser Ala Asp Ser Glu Leu Lys Ala Leu Val Cys Met Ala 85 90

Leu Asn Glu Pro Ala Ser Gly Val Leu Gly Glu Pro His Leu Gln Xaa

Arg Val Thr Xaa Arg Ala Ser Leu Pro Ala Leu Xaa Leu His Gly Thr
115 120 125

His Arg Leu Leu Lys Ile Ala Ser Thr Cys Ser Val Ala Ser Thr Thr 130 135 140

<210> 1273

<211> 252

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (32)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1273

Ala Arg Ala Pro Pro Arg Pro Arg Arg Ala Gly Arg Cys Gln Leu Pro
1 10 15

Gln Arg Pro Ala Glu Ala Arg Cys Met Leu Ser Arg Cys Arg Ser Xaa 20 25 30

Leu Leu His Val Leu Gly Leu Ser Phe Leu Leu Gln Thr Arg Arg Pro 35 40 45

Ile Leu Leu Cys Ser Pro Arg Leu Met Lys Pro Leu Val Val Phe Val
50 60

Leu Gly Gly Pro Gly Ala Gly Lys Gly Thr Gln Cys Ala Arg Ile Val 65 70 75 80

Glu Lys Tyr Gly Tyr Thr His Leu Ser Ala Gly Glu Leu Leu Arg Asp 85 90 95

Glu Arg Lys Asn Pro Asp Ser Gln Tyr Gly Glu Leu Ile Glu Lys Tyr 100 105 110

Ile Lys Glu Gly Lys Ile Val Pro Val Glu Ile Thr Ile Ser Leu Leu 115 120 125

Lys Arg Glu Met Asp Gln Thr Met Ala Ala Asn Ala Gln Lys Asn Lys 130 135 140

Phe Leu Ile Asp Gly Phe Pro Arg Asn Gln Asp Asn Leu Gln Gly Trp

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1300

155 160 145 150 Asn Lys Thr Met Asp Gly Lys Ala Asp Val Ser Phe Val Leu Phe Phe 170 165 Asp Cys Asn Asn Glu Ile Cys Ile Glu Arg Cys Leu Glu Arg Gly Lys 185 Ser Ser Gly Arg Ser Asp Asp Asn Arg Glu Ser Leu Glu Lys Arg Ile 200 Gln Thr Tyr Leu Gln Ser Thr Lys Pro Ile Ile Asp Leu Tyr Glu Glu 215 Met Gly Lys Val Lys Lys Ile Asp Ala Ser Lys Ser Val Asp Glu Val Phe Asp Glu Val Val Gln Ile Phe Asp Lys Glu Gly <210> 1274 <211> 425 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (35) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1274 Ala Ser Glu Arg Ser Glu Ala Arg Arg Lys Leu Arg Glu Cys Asp Gly Leu Val Asp Ala Leu Ile Phe Ile Val Gln Ala Glu Ile Gly Gln Lys Asp Ser Xaa Ser Lys Leu Val Glu Asn Cys Val Cys Leu Leu Arg Asn 35 40 Leu Ser Tyr Gln Val His Arg Glu Ile Pro Gln Ala Glu Arg Tyr Gln 55 Glu Ala Ala Pro Asn Val Ala Asn Asn Thr Gly Pro His Ala Ala Ser 65 70 Cys Phe Gly Ala Lys Lys Gly Lys Lys Pro Ile Glu Asp Pro 90

Ala	Asn	Asp	Thr 100	Val	Asp	Phe	Pro	Lys 105	Arg	Thr	Ser	Pro	Ala 110	Arg	Gly
Tyr	Glu	Leu 115	Leu	Phe	Gln	Pro	Glu 120	Val	Val	Arg	Ile	Туг 125	Ile	Ser	Leu
Leu	Lys 130	Glu	Ser	Lys	Thr	Pro 135	Ala	Ile	Leu	Glu	Ala 140	Ser	Ala	Gly	Ala
Ile 145	Gln	Asn	Leu	Сув	Ala 150	Gly	Arg	Trp	Thr	Tyr 155	Gly	Arg	Tyr	Ile	Arç
Ser	Ala	Leu	Arg	Gln 165	Glu	Lys	Ala	Leu	Ser 170	Ala	Ile	Ala	Asp	Leu 175	Leu
Thr	Asn	Glu	His 180	Glu	Arg	Val	Val	Lys 185	Ala	Ala	Ser	Gly	Ala 190	Leu	Arg
Asn	Leu	Ala 195	Val	Asp	Ala	Arg	Asn 200	Lys	Glu	Leu	Ile	Gly 205	Lys	His	Ala
Ile	Pro 210	Asn	Leu	Val	Lys	Asn 215	Leu	Pro	Gly	Gly	Gln 220	Gln	Asn	Ser	Ser
Trp 225	Asn	Phe	Ser	Glu	Asp 230	Thr	Val	Ile	Ser	Ile 235	Leu	Asn	Thr	Ile	Asn 240
Glu	Val	Ile		Glu 245	Asn	Leu	Glu	Ala	Ala 250	Lys	Lys	Leu	Arg	Glu 255	Thr
Gln	Gly	Ile	Glu 260	Lys	Leu	Val	Leu	11e 265	Asn	Lys	Ser	Gly	Asn 270	Arg	Ser
Glu	Lys	Glu 275	Val	Arg	Ala	Ala	Ala 280	Leu	Val	Leu	Gln	Thr 285	Ile	Trp	Gly
Tyr	Lys 290	Glu	Leu	Arg	Lys	Pro 295	Leu	Glu	Lys	Glu	Gly 300	Trp	Lys	Lys	Ser
Asp 305	Phe	Gln	Val	Asn	Leu 310	Asn	Asn	Ala	Ser	Arg 315	Ser	Gln	Ser	Ser	His 320
Ser	Tyr	Asp	Asp	Ser 325	Thr	Leu	Pro	Leu	11e 330	Asp	Arg	Asn	Gln	Lys 335	Ser
Asp	Lys	Lys	Pro 340	Asp	Arg	Glu	Glu	Ile 345	Gln	Met	Ser	Aşn	Met 350	Gly	Ser
Asn		Lys 355	Ser	Leu	Asp		Asn 360		Ser	Thr	Pro	Asn 365	Glu	Arg	Gly

Asp His Asn Arg Thr Leu Asp Arg Ser Gly Asp Leu Gly Asp Met Glu 370 380

Pro Leu Lys Gly Thr Thr Pro Leu Met Gln Asp Glu Gly Gln Glu Ser 385 390 395 400

Leu Glu Glu Glu Leu Asp Val Leu Val Leu Asp Asp Glu Gly Gln 405 415

Val Ser Tyr Pro Ser Met Gln Lys Ile 420 425

<210> 1275

<211> 111

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (10)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1275

Phe Phe Phe Ser Ser Leu Phe Ser Leu Xaa Phe Leu Lys Lys Gly Lys

1 10 15

Lys Cys Ile Arg Thr Pro Lys Ile Ser Lys Pro Ile Lys Phe Glu Leu 20 25 30

Ser Gly Cys Thr Ser Met Lys Thr Tyr Arg Ala Lys Phe Cys Gly Val 35 40 45

Cys Thr Asp Gly Arg Cys Cys Thr Pro His Arg Thr Thr Thr Leu Pro 50 55 60

Val Glu Phe Lys Cys Pro Asp Gly Glu Val Met Lys Lys Asn Met Met 65 70 75 80

Phe Ile Lys Thr Cys Ala Cys His Tyr Asn Cys Pro Gly Asp Asn Asp 85 90 95

Ile Phe Glu Ser Leu Tyr Tyr Arg Lys Met Tyr Gly Asp Met Ala 100 105 110

<210> 1276

<211> 766

<212> PRT

<213>	Homo	sapiens
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	Ω>	2	

Gly Asp Phe Ile Met Leu Arg Ala Gly Arg Arg Ala Pro Leu Pro Ser 1 5 10 15

Pro Pro Ser Leu Asp Ser Pro Gly Pro Gln Leu Met Pro Ser Pro Arg 20 25 30

Pro Val Leu Leu Arg Gly Ala Arg Ala Ala Leu Leu Leu Leu Pro 35 40 45

Pro Arg Leu Leu Ala Arg Pro Ser Leu Leu Leu Arg Arg Ser Leu Ser 50 55 60

Ala Ala Ser Cys Ala Pro Ile Ser Leu Pro Ala Ala Ala Ser Arg Ser 65 70 75 80

Ser Met Asp Gly Ala Gly Ala Glu Glu Val Leu Ala Pro Leu Arg Leu 85 90 95

Ala Val Arg Gln Gln Gly Asp Leu Val Arg Lys Leu Lys Glu Asp Lys
100 105 110

Ala Pro Gln Val Asp Val Asp Lys Ala Val Ala Glu Leu Lys Ala Arg 115 120 125

Lys Arg Val Leu Glu Ala Lys Glu Leu Ala Leu Gln Pro Lys Asp Asp 130 135 140

Ile Val Asp Arg Ala Lys Met Glu Asp Thr Leu Lys Arg Arg Phe Phe 145 150 155 160

Tyr Asp Gln Ala Phe Ala Ile Tyr Gly Gly Val Ser Gly Leu Tyr Asp 165 170 175

Phe Gly Pro Val Gly Cys Ala Leu Lys Asn Asn Ile Ile Gln Thr Trp 180 185 190

Arg Gln His Phe Ile Gln Glu Glu Gln Ile Leu Glu Ile Asp Cys Thr 195 200 205

Met Leu Thr Pro Glu Pro Val Leu Lys Thr Ser Gly His Val Asp Lys 210 215 220

Phe Ala Asp Phe Met Val Lys Asp Val Lys Asn Gly Glu Cys Phe Arg 225 230 235 240

Ala Asp His Leu Leu Lys Ala His Leu Gln Lys Leu Met Ser Asp Lys
245 250 255

Lys	3 Cys	s Ser	260		Lys	Lys	Ser	Glu 265		: Glu	Ser	Val	270		Gln
Leu	Asp	275		Gly	Gln	Gln	Glu 280		Ala	Asp	Leu	Phe 285		. Asn	Tyr
Asn	290		Ser	Pro	Ile	Thr 295		Asn	Asp	Leu	Ser 300		Pro	Val	Ser
Phe 305		Leu	Met	Phe	1 Lys		Phe	Ilė	Gly	Pro 315		Gly	Asn	Met	Pro 320
Gly	Tyr	Leu	Arg	325		Thr	Ala	Gln	Gly 330		Phe	Leu	Asn	Phe	Lys
Arg	Leu	Leu	Glu 340		Asn	Gln	Gly	Lys 345		Pro	Phe	Ala	Ala 350	Ala	Gln
Ile	Gly	355		Phe	Arg	Asn	Glu 360	Ile	Ser	Pro	Arg	Ser 365	Gly	Leu	Ile
Arg	Val 370		Glu	Phe	Thr	Met 375	Ala	Glu	Ile	Glu	His 380	Phe	Val	Asp	Pro
Ser 385		Lys	Asp	His	Pro 390	Lys	Phe	Gln	Asn	Val 395	Ala	Asp	Leu	His	Leu 400
Tyr	Leu	Tyr	Ser	Ala 405	Lys	Ala	Gln	Val	Ser 410	Gly	Gln	Ser	Ala	Arg 415	Lys
Met	Arg	Leu	Gly 420	Asp	Ala	Val	Glu	Gln 425	Gly	Val	Ile	Asn	Asn 430	Thr	Val
Leu	Gly	Tyr 435	Phe	Ile	Gly	Arg	Ile 440	Tyr	Leu	Tyr	Leu	Thr 445	Lys	Val	Gly
Ile	Ser 450	Pro	Asp	Lys	Leu	Arg 455	Phe	Arg	Gln	His	Met 460	Glu	Asn	Glu	Met
Ala 465	His	Tyr	Ala	Суз	Asp 470	Cys	Trp	Asp	Ala	Glu 475	Ser	Lys	Thr	Ser	Tyr 480
Gly	Trp	Ile	Glu	Ile 485	Val	Gly	Суз	Ala	Asp 490	Arg	Ser	Сув	Tyr	Asp 495	Leu
Ser	Cys	His	Ala 500	Arg	Ala	Thr	Lys	Val 505	Pro	Leu	Val	Ala	Glu 510	Lys	Pro
Leu	Lys	Glu 515	Pro	Lys	Thr		Asn 520	Val	Val	Gln	Phe	Glu 525	Pro	Ser	Lys

Gly	Ala	Ile	Gly	Lys	Ala	Tyr	Lys	Lys	Asp	Ala	Lys	Leu	Val	Met	Glu
	530					535					540				

- Tyr Leu Ala Ile Cys Asp Glu Cys Tyr Ile Thr Glu Met Glu Met Leu 545 550 555 560
- Leu Asn Glu Lys Gly Glu Phe Thr Ile Glu Thr Glu Gly Lys Thr Phe 565 570 575
- Gln Leu Thr Lys Asp Met Ile Asn Val Lys Arg Phe Gln Lys Thr Leu 580 585 590
- Tyr Val Glu Glu Val Val Pro Asn Val Ile Glu Pro Ser Phe Gly Leu
 595 600 605
- Gly Arg Ile Met Tyr Thr Val Phe Glu His Thr Phe His Val Arg Glu 610 615 620
- Gly Asp Glu Gln Arg Thr Phe Phe Ser Phe Pro Ala Val Val Ala Pro 625 630 635 640
- Phe Lys Cys Ser Val Leu Pro Leu Ser Gln Asn Gln Glu Phe Met Pro 645 650 655
- Phe Val Lys Glu Leu Ser Glu Ala Leu Thr Arg His Gly Val Ser His 660 665 670
- Lys Val Asp Asp Ser Ser Gly Ser Ile Gly Arg Arg Tyr Ala Arg Thr 675 680 685
- Asp Glu Ile Gly Val Ala Phe Gly Val Thr Ile Asp Phe Asp Thr Val 690 695 700
- Asn Lys Thr Pro His Thr Ala Thr Leu Arg Asp Arg Asp Ser Met Arg 705 710 715 720
- Gln Ile Arg Ala Glu Ile Ser Glu Leu Pro Ser Ile Val Gln Asp Leu 725 730 735
- Ala Asn Gly Asn Ile Thr Trp Ala Asp Val Glu Ala Arg Tyr Pro Leu 740 745 750
- Phe Glu Gly Gln Glu Thr Gly Lys Lys Glu Thr Ile Glu Glu 755 760 765

<210> 1277

<211> 386

<212> PRT

<213> Homo sapiens

<22															
	1> S														
	2> (
<22	3> X	aa e	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
<40	0> 1	277													
Leu	Gly	Ser	Arg	Gln	Ala	Ala	Gly	Thr	Met	Arq	Gly	Gln	Arq	Ser	Leu
1			_	5			_		10	•	•		•	15	
Leu	Leu	Gly	Pro	Ala	Arg	Leu	Cys	Leu	Arg	Leu	Leu	Leu	Leu	Leu	Gly
			20					25					30		_
_	_	_		_											
Tyr	Arg	Arg 35		Cys	Pro	Pro		Leu	Arg	Gly	Leu		Gln	Arg	Trp
		33					40					45			
Arg	Tyr	Gly	Lys	Val	Cys	Leu	Arg	Ser	Leu	Leu	Tvr	Asn	Ser	Phe	Gly
_	50		-		•	55	,				60				1
		Asp	Thr	Ala		Asp	Ala	Ala	Phe	Xaa	Pro	Val	Tyr	Trp	Leu
65					70					75					80
Val	Agn	Acn	17 = 1	T10	224	ሞፖጥ	Bho	C1	Wal	17-1	Dho	17-1	1701	T 011	Val
V4.	map	Non	Val	85	лц	тър	FIIE	GIY	90	vai	Pne	val	vai	95	val
									,,,					,,	
Ile	Val	Leu	Thr	Gly	Ser	Ile	Val	Ala	Ile	Ala	Tyr	Leu	Cys	Val	Leu
			100					105			-		110		
Pro	Leu		Leu	Arg	Thr	Tyr		Val	Pro	Arg	Leu		Trp	His	Phe
		115					120					125			
Phe	የ የ	Ser	Hig	Trn	Acn	T.em	T10	T.OU	Tla	Wa 1	Dhe	uie	m	Titre	Gln
	130	561		11p	VPII	135	116	Leu	116	val	140	urs	TYL	TYL	GIII
Ala	Ile	Thr	Thr	Pro	Pro	Gly	Tyr	Pro	Pro	Gln	Gly	Arg	Asn	Asp	Ile
145					150					155					160
- 1 -		•	_			_	_	_							
AIA	Thr	Val	ser	11e	Cys	Lys	Lys	Cys		Tyr	Pro	Lys	Pro		Arg
				100					170					175	
Thr	His	His	Cys	Ser	Ile	Cvs	Asn	Ara	Cvs	Val	Leu	Lvs	Met	Asp	His
			180					185				-1-	190		
His	Cys	Pro	Trp	Leu	Asn	Asn	Cys	Val	Gly	His	Tyr	Asn	His	Arg	Tyr
		195					200					205			
Db.	Dh-	e	Dh -		Db -	Db =	M = 4	ml	•	6 3	0		_	_	
rne	210	ser	rne	cys	rne	Phe 215	Met	Thr	теп	GIÀ	Cys 220	Val	Tyr	Суз	Ser
	~10					213					220				
Tyr	Gly	Ser	Trp	Asp	Leu	Phe	Arg	Glu	Ala	Tyr	Ala	Ala	Ile	Glu	Lys
225	-		_	-	230		-			235			. –		240

Met	Lys	Gln	Leu	Asp 245	Lys	Asn	Lys	Leu	Gln 250	Ala	Val	Ala	Asn	Gln 255	Thr
Tyr	His	Gln	Thr 260	Pro	Pro	Pro	Thr	Phe 265	Ser	Phe	Arg	Glu	Arg 270	Met	Thr
His	Lys	Ser 275	Leu	Val	Tyr	Leu	Trp 280	Phe	Leu	Суѕ	Ser	ser 285	Val	Ala	Leu
Ala	Leu 290	Gly	Ala	Leu	Thr	Val 295	Trp	His	Ala	Val	Leu 300	Ile	Ser	Arg	Gly
Glu 305	Thr	Ser	Ile	Glu	Arg 310	His	Ile	Asn	Lys	Lys 315	Glu	Arg	Arg	Arg	Leu 320
Gln	Ala	Lys	Gly	Arg 325	Val	Phe	Arg	Asn	Pro 330	Tyr	Asn	Tyr	Gly	Cys 335	Leu
Asp	Asn	Trp	Lys 340	Val	Phe	Leu	Gly	Val 345	Asp	Thr	Gly	Arg	His 350	Trp	Leu
Thr	Arg	Val 355	Leu	Leu	Pro	Ser	Ser 360	His	Leu	Pro	His	Gly 365	Asn	Gly	Met
Ser	Trp 370	Glu	Pro	Pro	Pro	Trp 375	Val	Thr	Ala	His	Ser 380	Ala	Ser	Val	Met
Ala 385	Val														
<210)> 12	78													
	> 16														
<213	?> PF }> Ho	omo s	apie	ens											
)> 12 Lys		Ser	Ala	Glu	Thr	Pro	Arg	Pro	Gln	Pro	Val	Asp	Lvs	Leu
1	•			5					10					15	
Glu	Lys	Ile	Leu 20	Glu	Lys	Leu	Leu	Thr 25	Arg	Phe	Pro	Gln	Cys 30	Asn	Lys
Ala	Gln	Met 35	Thr	Asn	Ile	Leu	Gln 40	Gln	Ile	Lys	Thr	Ala 45	Arg	Thr	Thr
Met	Ala 50	Gly	Leu	Thr	Met	Glu 55	Glu	Leu	Ile	Gln	Leu 60	Val	Ala	Ala	Arg

Leu Ala Glu His Glu Arg Val Ala Ala Ser Thr Gln Pro Leu Gly Arg
65 70 75 80

Ile Arg Ala Leu Phe Pro Ala Pro Leu Ala Gln Ile Ser Thr Pro Met 85 90 95

Phe Leu Pro Ser Ala Gln Val Ser Tyr Pro Gly Arg Ser Ser His Ala 100 105 110

Pro Ala Thr Cys Lys Leu Cys Leu Met Cys Gln Lys Leu Val Gln Pro 115 120 125

Ser Glu Leu His Pro Met Ala Cys Thr His Val Leu His Lys Glu Cys 130 135 140

Ile Lys Phe Trp Ala Gln Thr Asn Thr Asn Asp Thr Cys Pro Phe Cys 145 150 155 160

Pro Thr Leu Lys

<210> 1279

<211> 469

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (15)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (81)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1279

Pro Val Ala Val Gly Arg Val Arg Val Thr Ala Glu Gly Arg Xaa Met

1 5 10 15

Val Leu Gln Thr Thr Lys Gly Leu Arg Leu Leu Phe Asp Gly Asp Ala 20 25 30

His Leu Leu Met Ser Ile Pro Ser Pro Phe Arg Gly Arg Leu Cys Gly 35 40 45

Leu Cys Gly Asn Phe Asn Gly Asn Trp Ser Asp Asp Phe Val Leu Pro 50 55 60

65		Ser	ALC	i Ala	70		Val	GIU	THE	75		Ala	Ala	. Trp	8
Xaa	Pro	Gly	Ser	Ser 85		Gly	Суз	Gly	Glu 90		Cys	Gly	Pro	Gln 95	
Суз	Pro	Val	Cys 100	Leu	Ala	Glu	Glu	Thr 105		Pro	Tyr	Glu	Ser 110		Gl
Ala	Суз	Gly 115		Leu	Arg	Asn	Pro 120		Gly	Pro	Phe	125		Суз	Gl
	130			Pro		135					140			-	
145				Gly	150					155					160
				Cys 165					170					175	
			180					185					190		
		195		Thr			200					205			
	210			Thr		215					220				
225				Gln	230					235					240
				Arg 245					250					255	
			260	Arg				265					270		
		275		Cys			280					285			
	290			Trp		295					300				_
05				Thr	310					315					320
ьтА	val	TYT	GTÜ	Leu 325	ser	ser	arg	cys	9ro 330	СТÀ	ren	GIN	Asn	Thr 335	Ile

Pro Trp Tyr Arg Val Val Ala Glu Val Gln Ile Cys His Gly Lys Thr 340 345 350 Glu Ala Val Gly Gln Val His Ile Phe Phe Gln Asp Gly Met Val Thr 360 Leu Thr Pro Asn Lys Gly Val Trp Val Asn Gly Leu Arg Val Asp Leu 375 Pro Ala Glu Lys Leu Ala Ser Val Ser Val Ser Arg Thr Pro Asp Gly 385 390 395 Ser Leu Leu Val Arg Gln Lys Ala Gly Val Gln Val Trp Leu Gly Ala 410 Asn Gly Lys Val Ala Val Ile Val Ser Asn Asp His Ala Gly Lys Leu Cys Gly Ala Cys Gly Asn Phe Asp Gly Asp Gln Thr Asn Asp Trp His 440 Asp Ser Gln Glu Lys Pro Ala Met Glu Lys Trp Arg Ala Gln Asp Phe 455 460 Ser Pro Cys Tyr Gly 465 <210> 1280 <211> 223 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (216) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (217) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1280 Gly Pro Arg Ala Leu Trp Pro Pro Pro Glu Val Gly Trp Gly Cys Ser Pro Asn Pro Thr Leu Leu Pro Pro Leu Ser His Phe Pro Leu Leu Arg

Trp Gly Thr Asn Asn Lys Glu Leu Thr Leu Pro Ala Pro Asn Pro Pro 35 40 Pro Ala Pro Pro Cys Pro Pro Arg Phe Trp Phe His Phe Ser Ser Val 55 His Lys Leu Pro Leu Asp Ser Cys Val Val Phe Cys Ser Met Phe His Ser Ser Thr Ser Val Ile Ala Ala Ala Thr Ser Ala Lys Cys Ser Ser Ser Leu Pro Pro Val Leu Pro Thr Ile Pro Ser Pro Lys Ile Leu Phe 105 Val Gly Lys Arg Gly Trp Gly Met Ala Gly Trp Val Thr Asp Tyr Pro 115 120 Ser Pro Arg Glu Gly Gly Ala Leu Pro Leu Gly Cys Cys Ser Arg Val Ser Lys Gly Ala Arg Ile Asp His Lys Gly Cys Arg Gly His Leu Leu 150 155 Pro Leu Phe Cys Trp Gly Gly Val Ala Met Ile Cys Pro Ser Leu Gly Leu Pro Leu Trp Phe Pro Ile Cys Ser Tyr Leu Asn Lys Lys Asn Ile 185 200 195 .

<210> 1281

<211> 37

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (31)

<223> Xaa equals any of the naturally occurring L-amino acids

Lys Lys Lys Lys Lys Lys Xaa Xaa Gly Gly Ala Pro Pro Pro

215

<400> 1281

Thr Gln Ser Lys Trp Arg Leu Glu Val Gln Cys Gly Lys Glu Lys Gln
1 10 15

Val Phe Ile Glu Ser Thr Asn Ser Thr Pro Phe Lys Asn Phe Xaa Gly
20 25 30

Thr Gln Pro Lys Gly 35

<210> 1282

<211> 458

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (249)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1282

Gly Pro Gln Arg Leu Ser Pro Gly Ala Met Leu Pro Ala Ala Thr Ala 1 5 10 15

Ser Leu Leu Gly Pro Leu Leu Thr Ala Cys Ala Leu Leu Pro Phe Ala 20 25 30

Gln Gly Gln Thr Pro Asn Tyr Thr Arg Pro Val Phe Leu Cys Gly Gly 35 40 45

Asp Val Lys Gly Glu Ser Gly Tyr Val Ala Ser Glu Gly Phe Pro Asn 50 55 60

Leu Tyr Pro Pro Asn Lys Glu Cys Ile Trp Thr Ile Thr Val Pro Glu 65 70 75 80

Gly Gln Thr Val Ser Leu Ser Phe Arg Val Phe Asp Leu Glu Leu His 85 90 95

Pro Ala Cys Arg Tyr Asp Ala Leu Glu Val Phe Ala Gly Ser Gly Thr 100 105 110

Ser Gly Gln Arg Leu Gly Arg Phe Cys Gly Thr Phe Arg Pro Ala Pro 115 120 125

Leu Val Ala Pro Gly Asn Gln Val Thr Leu Arg Met Thr Thr Asp Glu 130 135 140

Gly Thr Gly Gly Arg Gly Phe Leu Leu Trp Tyr Ser Gly Arg Ala Thr 145 150 155 160

Ser Gly Thr Glu His Gln Phe Cys Gly Gly Arg Leu Glu Lys Ala Gln

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				165					170					175	
Gly	Thr	Leu	Thr 180	Thr	Pro	Asn	Trp	Pro 185	Glu	Ser	Asp	Tyr	Pro 190	Pro	Gly
Ile	Ser	Cys 195	Ser	Trp	His	Ile	Ile 200	Ala	Pro	Pro	Asp	Gln 205	Val	Ile	Ala
Leu	Thr 210	Phe	Glu	Lys	Phe	Asp 215	Leu	Glu	Pro	Asp	Thr 220	Tyr	Cys	Arg	Tyr
Asp 225	Ser	Val	Ser	Val	Phe 230	Asn	Gly	Ala	Val	Ser 235	Asp	Asp	Ser	Arg	Arg 240
Leu	Gly	Lys	Phe	Cys 245	Gly	Asp	Ala	Xaa	Pro 250	Gly	Ser	Ile	Ser	Ser 255	Glu
Gly	Asn	Glu	Leu 260	Leu	Val	Gln	Phe	Val 265	Ser	Asp	Leu	Ser	Val 270	Thr	Ala
Asp	Gly	Phe 275	Ser	Ala	Ser	Tyr	Lys 280	Thr	Leu	Pro	Arg	Gly 285	Thr	Ala	Lys
Glu	Gly 290	Gln	Gly	Pro	Gly	Pro 295	Lys	Arg	Gly	Thr	Glu 300	Pro	Lys	Val	Lys
Leu 305	Pro	Pro	Lys	Ser	Gln 310	Pro	Pro	Glu ,	Lys	Thr 315	Glu	Glu	Ser	Pro	Ser 320
Ala	Pro	Asp	Ala	Pro 325	Thr	Cys	Pro	Lys	Gln 330	Суз	Arg	Arg	Thr	Gly 335	Thr
Leu	Gln	Ser	Asn 340	Phe	Cys	Ala	Ser	Ser 345	Leu	Val	Val	Thr	Ala 350	Thr	Val
Lys	Ser	Met 355	Val	Arg	Glu	Pro	Gly 360	Glu	Gly	Leu	Ala	Val 365	Thr	Val	Ser
Leu	Ile 370	Gly	Ala	Tyr	Lys	Thr 375	Gly	Gly	Leu	Asp	Leu 380	Pro	Ser	Pro	Pro
Thr 385	Gly	Ala	Ser	Leu	Lys 390	Phe	Tyr	Val	Pro	Cys 395	Lys	Gln	Cys	Pro	Pro 400
Met	Lys	Lys	Gly	Val 405	Ser	Tyr	Leu	Leu	Met 410	Gly	Gln	Val	Glu	Glu 415	Asn
Arg	Gly	Pro	Val 420	Leu	Pro	Pro	Glu	Ser 425	Phe	Val	Val	Leu	His 430	Arg	Pro
Asn	Gln	Asp	Gln	Ile	Leu	Thr	Asn	Leu	Ser	Lys	Arg	Lys	Cys	Pro	Ser

WO 00/55350 PCT/US00/05882

1314

435 440 445

Gln Pro Val Arg Ala Ala Ala Ser Gln Asp 450 455

<210> 1283

<211> 229

<212> PRT

<213> Homo sapiens

<220>

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<220>

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<222> (155)

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<400> 1283

Cys Arg Ala Pro Leu Gly Ala Gly Leu Ser Pro Ala Val Arg Arg Gln
1 5 10 15

Glu Pro Pro Phe Pro Leu Gly Val Thr Arg Gly Trp Gly Arg Trp Pro 20 25 30

Ile Gln Lys Arg Arg Glu Gly Ala Arg Pro Val Pro Xaa Ser Glu Arg 35 40 45

Ser Gln Glu Asp Gly Arg Gly Pro Ala Ala Arg Ser Ser Gly Thr Leu 50 55 60

Trp Arg Ile Arg Thr Arg Leu Ser Leu Cys Arg Asp Pro Glu Pro Pro 65 70 75 80

Pro Pro Leu Cys Leu Leu Arg Val Ser Leu Leu Cys Ala Leu Arg Ala 85 90 95

Gly Gly Arg Gly Ser Arg Trp Gly Glu Asp Gly Ala Arg Leu Leu Leu 100 105 110

Leu Pro Pro Ala Arg Ala Ala Gly Asn Gly Glu Ala Glu Pro Ser Gly
115 120 125

Gly Pro Ser Tyr Ala Gly Arg Met Leu Glu Ser Ser Gly Cys Lys Ala Leu Lys Glu Gly Val Leu Glu Lys Arg Xaa Xaa Gly Cys Cys Ser Ser Gly Arg Lys Ser Val Ala Ser Ser Pro Arg Lys Gly Cys Cys Leu Ser 165 170 Arg Pro Ser Ser Cys Asn Thr Ser Ser Ser Ser Asn Ser Ser Ser Ser 185 Ser Ser Asn Asn Ser Pro Gly Arg Gly Arg Pro Ser Arg Pro Asn Pro 200 Val Ala Pro Leu Ser Pro Ala Ser Ser Arg Arg Ser Ser Ser Arg Asn Cys Thr Ser Pro Thr 225 <210> 1284 <211> 390 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (52) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1284 Thr Ser Val Ala Ala Ala Ala Ala Arg Gly Arg Ala Gly Cys Pro Leu Thr Ala Ala Ser Ala Ala Arg Phe Lys Met Ala Ala Cys Ser His Ser Phe Ser Ala Glu Arg Leu Leu Thr Phe Ile Val Phe Ser Ala Arg Phe 35 Asp Arg Leu Xaa Pro Ala Ala Leu Ser Gly Ile Phe Tyr Gln Ala Glu Met His Arg Thr Thr Arg Ile Lys Ile Thr Glu Leu Asn Pro His Leu

70

Met Cys Val Leu Cys Gly Gly Tyr Phe Ile Asp Ala Thr Thr Ile Ile

				85					90					95	
Glu	Cys	Leu	His 100		Phe	Cys	Lys	Thr 105		Ile	Val	Arg	Туг 110	Leu	Glu
Thr	Ser	Lys 115	Tyr	Cys	Pro	Ile	Cys 120	Asp	Val	Gln	Val	His 125	Lys	Thr	Arg
Pro	Leu 130	Leu	Asn	Ile	Arg	Ser 135	Asp	Lys	Thr	Leu	Gln 140		Ile	Val	Ту
Lys 145	Leu	Val	Pro	Gly	Leu 150	Phe	Lys	Asn	Glu	Met 155	Lys	Arg	Arg	Arg	Asp 160
Phe	Tyr	Ala	Ala	His 165	Pro	Ser	Ala	Asp	Ala 170	Ala	Asn	Gly	Ser	Asn 175	Glu
Asp	Arg	Gly	Glu 180	Val	Ala	Asp	Glu	Asp 185	Lys	Arg	Ile	Ile	Thr 190	Asp	Asp
		195			Ser		200					205			
	210				Asp	215					220				
225					Cys 230					235					240
				245	Lys				250					255	
			260		Glu			265					270		
		275			Thr		280					285			
	290				Thr	295					300				
305					Ala 310					315					320
				325	Ala				330					335	
		٠	340		Pro			345					350		
тте	ser	ser	Thr	Met	Asn	Gly	Thr	Ser	Asn	Ser	Pro	Ser	Gly	Asn	His

355 360 365 Gln Ser Ser Phe Ala Asn Arg Pro Arg Lys Ser Ser Val Asn Gly Ser 375 Ser Ala Thr Ser Ser Gly 385 390 <210> 1285 <211> 39 <212> PRT <213> Homo sapiens <400> 1285 His Ala Ser Ala Gly Ser Gln Leu Phe Glu Met His Glu Lys Leu Ser Cys Met Ala Asn Ser Val Ile Lys Asn Leu Gln Ser Arg Trp Arg Ser . 20 25 Pro Ser His Glu Asn Ser Ile 35 <210> 1286 <211> 453 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (38) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (101) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (110) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (286) <223> Xaa equals any of the naturally occurring L-amino acids

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	Arg 1	Arg	Ser	Val	Ile 5		Asp	Ser	Asn	Ala 10		Ala	Leu	Glu	Leu 15	Pro
	Gly	Leu	Pro	Leu 20	Ser	Leu	Pro	Gln	Pro 25	Ser	Ile	Pro	Ala	Ala 30	Val	Pro
	Gln	Ser	Ala 35		Pro	Xaa	Pro	His 40	Arg	Glu	Glu	Thr	Val 45	Thr	Ala	Thr
	Ala	Thr 50	Ser	Gln	Val	Ala	Gln 55	Gln	Pro	Pro	Ala	Ala 60	Ala	Ala	Pro	Gly
	Glu 65	Gln	Ala	Val	Ala	Gly 70	Pro	Ala	Pro	Arg	Leu 75	Ser	Pro	Ala	Val	Pro 80
	Ala	Lys	Thr	Ala	Gln 85	Cys	Pro	Ser	Leu	Ala 90	Leu	Trp	Gly	Ala	Lys 95	Arg
	Ser	Arg	Arg	Arg 100	Xaa	Lys	Val	Ala	Ala 105	Ala	Ala	Gln	Ala	Xaa 110	Lys	Glu
	Pro	Gln	Glu 115	Glu	Arg	Ser	Gln	Gln 120	Gln	Asp	Asp	Ile	Glu 125	Glu	Leu	Glu
	Thr	Lys 130	Ala	Val	Gly	Met	Ser 135	Asn	Asp	Gly	Arg	Phe 140	Leu	Lys	Phe	Asp
	Ile 145	Glu	Ile	Gly	Arg	Gly 150	Ser	Phe	Lys	Thr	Val 155	Tyr	Lys	Gly	Leu	Asp 160
	Thr	Glu	Thr	Thr	Val 165	Glu	Val	Ala	Trp	Cys 170	Glu	Leu	Gln	Asp	Arg 175	Lys
	Leu	Thr	Lys	Ser 180	Glu	Arg	Gln	Arg	Phe 185	Lys	Glu	Glu	Ala	Glu 190	Met	Leu
	Lys	Gly	Leu 195	Gln	His	Pro	Asn	Ile 200	Val	Arg	Phe	Tyr	Asp 205	Ser	Trp	Glu
	Ser	Thr 210	Val	Lys	Gly	Lys	Lys 215	Cys	Ile	Val	Leu	Val 220	Thr	Glu	Leu	Met
	Thr 225	Ser	Gly	Thr	Leu	Lys 230	Thr	Tyr	Leu	Lys	Arg 235		Lys	Val	Met	Lys 240
	Ile	Lys	Val	Leu	Arg 245	Ser	Trp	Cys	Arg	Gln 250	Ile	Leu	Lys	Gly	Leu 255	Gln
1	Phe	Leu	His	Thr	Arg	Thr	Pro	Pro	Ile	Ile	His	Arg	Asp	Leu	Lys	Суз

260 265 270 Asp Asn Ile Phe Ile Thr Gly Pro Thr Gly Ser Val Lys Xaa Gly Asp 275 280 Leu Gly Leu Ala Thr Leu Lys Arg Ala Ser Phe Ala Lys Ser Val Ile 295 Gly Thr Pro Glu Phe Met Ala Pro Glu Met Tyr Glu Glu Lys Tyr Asp 310 315 Glu Ser Val Asp Val Tyr Ala Phe Gly Met Cys Met Leu Glu Met Ala 325 Thr Ser Glu Tyr Pro Tyr Ser Glu Cys Gln Asn Ala Ala Gln Ile Tyr 345 Arg Arg Val Thr Ser Gly Val Lys Pro Ala Ser Phe Asp Lys Val Ala 355 360 Ile Pro Glu Val Lys Glu Ile Ile Glu Gly Cys Ile Arg Gln Asn Lys Asp Glu Arg Tyr Ser Ile Lys Asp Leu Leu Asn His Ala Phe Phe Gln 390 395 Glu Glu Thr Gly Val Arg Val Glu Leu Ala Glu Glu Asp Asp Gly Glu 405 Lys Ile Ala Ile Lys Leu Trp Leu Arg Ile Glu Asp Ile Lys Lys Leu 425 Lys Gly Lys Tyr Lys Asp Lys Lys Lys Lys Lys Lys Lys Lys Lys 435 440 Asn Thr His Arg Ala 450

<210> 1287

<211> 450

<212> PRT

<213> Homo sapiens

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<222> (33)

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Trp Met Thr Val Gly Pro Ala Ser Ala Leu Phe Pro Cys Gln Thr Pro
                                 25
Xaa Phe Pro Trp Thr Glu Trp Asn Xaa Trp Xaa Phe Thr Ala His Val
         35
                             40
                                                  45
Leu Ser Gln Lys Phe Glu Lys Glu Leu Ser Lys Val Arg Glu Tyr Val
                         55
Gln Leu Ile Ser Val Tyr Glu Lys Lys Leu Leu Asn Leu Thr Val Arg
                     70
                                         75
Ile Asp Ile Met Glu Lys Asp Thr Ile Ser Tyr Thr Glu Leu Asp Phe
```

				85					90					95	
Glu	Leu	Ile	Lys 100	Val	Glu	Val	Lys	Glu 105		Glu	Lys	Leu	Val 110	Ile	Glı
Leu	Lys	Glu 115	Xaa	Phe	Gly	Gly	Ser 120		Glu	Ile	Val	Asp 125	Gln	Leu	Glı
Val	Glu 130	Ile	Arg	Asn	Met	Thr 135	Leu	Leu	Val	Glu	Lys 140		Glu	Thr	Let
Asp 145		Asn	Asn	Val	Leu 150		Ile	Arg	Arg	Glu 155	Ile	Val	Ala	Leu	Lys 160
Thr	Lys	Leu	Lys	Glu 165	Cys	Glu	Ala	Ser	Lys 170	Asp	Gln	Asn	Thr	Pro 175	Va)
Val	His	Pro	Pro 180	Pro	Thr	Pro	Gly	Ser 185	Суз	Gly	His	Gly	Gly 190	Val	Va]
Xaa	Ile	Ser 195	Lys	Pro	Ser	Val	Val 200	Gln	Leu	Asn	Trp	Arg 205	Gly	Phe	Ser
Tyr	Leu 210	Tyr	Gly	Ala	Trp	Gly 215	Arg	Asp	Tyr	Ser	Pro 220	Gln	His	Pro	Asr
Lys 225	Gly	Leu	Tyr	Trp	Val 230	Ala	Pro	Leu	Asn	Thr 235	Asp	Gly	Arg	Leu	Leu 240
Glu	Tyr	Tyr	Arg	Leu 245	Tyr	Asn	Thr	Leu	Asp 250	Asp	Leu	Leu	Leu	Tyr 255	Ile
Asn	Ala	Arg	Glu 260	Leu	Arg	Ile	Thr	Tyr 265	Gly	Gln	Gly	Ser	Gly 270	Thr	Ala
Val	Tyr	Asn 275	Asn	Asn	Met	Tyr	Val 280	Asn	Met	Tyr	Asn	Thr 285	Gly	Asn	Ile
Ala	Arg 290	Val	Asn	Leu	Thr	Thr 295	Asn	Thr	Ile	Ala	Val 300	Thr	Gln	Thr	Leu
Pro 305	Asn	Ala	Ala	Tyr	Asn 310	Asn	Arg	Phe	Xaa	Tyr 315	Ala	Asn	Val	Ala	Trp 320
Gln	Asp	Ile	Asp	Phe 325	Xaa	Val	Asp	Glu	Asn 330	Gly	Leu	Trp	Val	Ile 335	Tyr
Ser	Thr	Glu	Ala 340	Ser	Thr	Gly	Xaa	Met 345	Val	Ile	Ser	Lys	Leu 350	Asn	Asp
Thr	Thr	Leu	Gln	Val	Leu	Asn	Thr	Trp	Tvr	Thr	Lvs	Gln	Tvr	Lvs	Pro

355 360 365 Ser Ala Ser Asn Ala Phe Met Val Cys Gly Val Leu Tyr Ala Thr Arg 375 Thr Met Asn Thr Arg Thr Glu Glu Ile Phe Tyr Tyr Tyr Asp Thr Asn 390 395 Thr Gly Lys Glu Gly Lys Leu Asp Ile Val Met His Lys Met Gln Glu. 410 Lys Val Gln Ser Ile Asn Tyr Asn Pro Phe Asp Gln Lys Leu Tyr Val Tyr Asn Asp Gly Tyr Leu Leu Asn Tyr Asp Leu Ser Val Leu Gln Lys 440 Pro Gln 450 <210> 1288 <211> 164 <212> PRT <213> Homo sapiens <400> 1288 Leu Gln Gln Ala Leu Pro Asn Asn Gly Leu Leu Phe Thr Trp Thr Leu Ser Lys Glu Gly Gly Arg Glu Gly Gln Ser Gly Val Ser Phe Gln His Ser Ser Gln Lys Gly Glu Arg Phe Ser Gly Trp Cys His Ala Ile Gly 40 Ile Lys Gln Glu Ala His Gly Trp Leu Leu Asn Glu Glu Gln Asn Leu 55 50 Gly Ala Leu Trp Leu Thr Thr Ala Ile Cys Gly Ala Gly Thr His Thr Ser Arg Gln Leu Gln Phe Cys Thr Phe Ser Leu Leu Asp Ser Lys Ser 85 Arg Cys Cys Leu Ala Ala Leu Arg Gly His Ser Leu Leu Arg Arg Ala 105 Leu Gln Ser Pro Ala Pro Gly Leu Gly Glu Trp Met Arg Leu Leu Pro

Tyr Asp Thr Cys Gln Asp Ala Leu Pro Pro Pro Leu Lys Val Gly Pro Gly Gln His Cys Ser Leu Leu Ser Ala Phe Ser Gly Leu Arg Ser Gln 155 Tyr Glu Leu Pro <210> 1289 <211> 40 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (6) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (30) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1289 Trp Met Ser Glu Tyr Xaa Gln Trp Val Phe Leu Ile Ser Leu Arg Ile 1 5 15 Cys Leu Arg Val His Tyr Gln Gly Ile Ser Gly Thr Arg Xaa His Ser Leu His Gln Phe Leu Arg Val Leu <210> 1290 <211> 266 <212> PRT <213> Homo sapiens <400> 1290 Asp Ile Met Glu Ser Gly Phe Thr Ser Lys Asp Thr Tyr Leu Ser His 1 10 Phe Asn Pro Arg Asp Tyr Leu Glu Lys Tyr Tyr Lys Phe Gly Ser Arg 20 .

His	Ser	Ala 35	Glu	Ser	Gln	Ile	Leu 40	Lys	His	Leu	Leu	Lys 45	Asn	Leu	Phe
Lys	Ile 50	Phe	Cys	Leu	Asp	Gly 55	Val	Lys	Gly	Asp	Leu 60	Leu	Ile	Asp	Ile
Gly 65	Ser	Gly	Pro	Thr	Ile 70	Tyr	Gln	Leu	Leu	Ser 75	Ala	Cys	Glu	Ser	Phe 80
Lys	Glu	Ile	Val	Val 85	Thr	Asp	Tyr	Ser	Asp 90	Gln	Asn	Leu	Gln	Glu 95	Let
Glu	Lys	Trp	Leu 100	Lys	Lys	Glu	Pro	Glu 105	Ala	Phe	Asp	Trp	Ser 110	Pro	Va]
Val	Thr	Tyr 115	Val	Cys	Asp	Leu	Glu 120	Gly	Asn	Arg	Val	Lys 125	Gly	Pro	Glu
Lys	Glu 130	Glu	Lys	Leu	Arg	Gln 135	Ala	Val	Lys	Gln	Val 140	Leu	Lys	Cys	Asp
Val 145	Thr	Gln	Ser	Gln	Pro 150	Leu	Gly	Ala	Val	Pro 155	Leu	Pro	Pro	Ala	Asp 160
Суз	Val	Leu	Ser	Thr 165	Leu	Суз	Leu	Asp	Ala 170	Ala	Суз	Pro	Asp	Leu 175	Pro
Thr	Tyr	Cys	Arg 180	Ala	Leu	Arg	Asn	Leu 185	Gly	Ser	Leu	Leu	Lys 190	Pro	Gly
Gly	Phe	Leu 195	Val	Ile	Met	Asp	Ala 200	Leu	Lys	Ser	Ser	Tyr 205	Tyr	Met	Ile
Gly	Glu 210	Gln	Lys	Phe	Ser	Ser 215	Leu	Pro	Leu	Gly	Arg 220	Glu	Ala	Val	Glu
Ala 225	Ala	Val	Lys	Glu	Ala 230	Gly	Tyr	Thr	Ile	Glu 235	Trp	Phe	Glu	Val	Ile 240
Ser	Gln	Ser	Tyr	Ser 245	ser	Thr	Met	Ala	Asn 250	Asn	Glu	Gly	Leu	Phe 255	Ser

<210> 1291

<211> 112

<212> PRT

<213> Homo sapiens

260

. Leu Val Ala Arg Lys Leu Ser Arg Pro Leu

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<210> 1292

<211> 217

<212> PRT

<213> Homo sapiens

<400> 1292

Gly Ser Thr His Ala Ser Gly Thr Met Arg Ala Ala Ala Ile Ser Thr 1 5 10

Pro Lys Leu Asp Lys Met Pro Gly Met Phe Phe Ser Ala Asn Pro Lys
20 25 30

Glu Leu Lys Gly Thr Thr His Ser Leu Leu Asp Asp Lys Met Gln Lys 35 40 45

Arg Arg Pro Lys Thr Phe Gly Met Asp Met Lys Ala Tyr Leu Arg Ser 50 60

Met Ile Pro His Leu Glu Ser Gly Met Lys Ser Ser Lys Ser Lys Asp 65 70 75 Val Leu Ser Ala Ala Glu Val Met Gln Trp Ser Gln Ser Leu Glu Lys 90 Leu Leu Ala Asn Gln Thr Gly Gln Asn Val Phe Gly Ser Phe Leu Lys 105 Ser Glu Phe Ser Glu Glu Asn Ile Glu Phe Trp Leu Ala Cys Glu Asp 120 Tyr Lys Lys Thr Glu Ser Asp Leu Leu Pro Cys Lys Ala Glu Glu Ile 135 Tyr Lys Ala Phe Val His Ser Asp Ala Ala Lys Gln Ile Asn Ile Asp 150 Phe Arg Thr Arg Glu Ser Thr Ala Lys Lys Ile Lys Ala Pro Thr Pro 165 170 Thr Cys Phe Asp Glu Ala Gln Lys Val Ile Tyr Thr Leu Met Glu Lys 185 Asp Ser Tyr Pro Arg Phe Leu Lys Ser Asp Ile Tyr Leu Asn Leu Leu 200 Asn Asp Leu Gln Ala Asn Ser Leu Lys 210 215 <210> 1293 <211> 235 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (229) <223> Xaa equals any of the naturally occurring L-amino acids Leu His Leu Leu Ala Val Leu Glu Lys Met Ile Ser Gln Gly Asn Asn

Asn Lys Asn Gly Lys Asn Glu Thr Gly Asn Asn Asn Lys Asp Gly

Ser Asn His Lys Ala Glu Ser Gly Ala Leu Ile Glu Ala Ala Lys Ser 35 40 45

Lys Ile His Gln Tyr Lys Val Arg Ala Tyr Ile Gln Met Lys Ser Leu Lys Ala Cys Lys Arg Glu Ile Lys Ser Val Met Asn Thr Ala Gly Asn 70 75 Ser Ala Pro Ser Leu Phe Leu Lys Ser Asn Phe Glu Tyr Leu Arg Gly 90 Asn Tyr Arg Lys Ala Val Lys Leu Leu Asn Ser Ser Asn Ile Ala Glu 105 His Pro Gly Phe Met Lys Thr Gly Glu Cys Leu Arg Cys Met Phe Trp Asn Asn Leu Gly Cys Ile His Phe Ala Met Ser Lys His Asn Leu Gly 135 Ile Phe Tyr Phe Lys Lys Ala Leu Gln Glu Asn Asp Asn Val Cys Ala 150 155 Gln Leu Ser Ala Gly Ser Thr Asp Pro Gly Lys Lys Phe Ser Gly Arg 165 170 Pro Met Cys Thr Leu Leu Thr Asn Lys Arg Tyr Glu Leu Leu Tyr Asn Cys Gly Ile Gln Leu Leu His Ile Gly Arg Pro Leu Ala Ala Phe Glu 200 Cys Leu Ile Glu Ala Val Gln Val Tyr His Ala Asn Pro Arg Leu Trp 215 Leu Arg Leu Ala Xaa Met Leu His Cys Cys Gln 230 <210> 1294 <211> 275 <212> PRT

<213> Homo sapiens

<221> SITE

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<220>

<221> SITE

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C222> (50) C223> Xaa equals any of the naturally occurring L-amino acids C400> 1294 Ala Arg Gly Ala Arg Gly Arg Ala Leu Pro Ala Ser Gly Lys Ala Gly 1	<22	0>														
Access and equals any of the naturally occurring L-amino acids and Arg Gly Ala Arg Gly Arg Ala Leu Pro Ala Ser Gly Lys Ala Gly 1 1 5 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 15 10 15 15 15 10 15 15 15 15 15 15 15 15 15 15 15 15 15	<22	1> S	ITE													
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Ala Arg Gly Ala Arg Gly Arg Ala Leu Pro Ala Ser Gly Lys Ala Gly 1 10 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16	<40	0> 1:	294													
Arg Ala Arg Gly Ser Ala Xaa Gly Ser Ala Ala Arg Gly His Trp Ser 20 Leu Ala Arg Phe Pro Ala Pro Arg Gly Ser His Leu Pro Ala Arg Arg 45 Xaa Xaa Gly Arg Val Ser Thr Pro Ile Leu Arg Pro Val Ser Ser Ile 50 Pro Leu Ala Leu Ser Arg Glu Ser Arg Thr Ala Glu Glu Ser Ser Leu 65 Thr Pro Gln Pro Gln Val Gly Leu Val His Ile Met Thr Ser Phe Glu 85 Asp Ala Asp Thr Glu Glu Thr Val Thr Cys Leu Gln Met Thr Val Tyr 100 His Pro Gly Gln Leu Gln Cys Gly Ile Phe Gln Ser Ile Ser Phe Asr 125 Arg Glu Lys Leu Pro Ser Ser Glu Val Val Lys Phe Gly Arg Asn Ser 130 Asn Ile Cys His Tyr Thr Phe Gln Asp Lys Gln Val Ser Arg Val Glr 165 Phe Ser Leu Gln Leu Phe Lys Lys Phe Asn Ser Ser Val Leu Ser Phe 165 Glu Ile Lys Asn Met Ser Lys Lys Thr Asn Leu Ile Val Asp Ser Arg 180 Arg Phe Gly Glu Tyr Leu Asn Lys Met Asp Leu Pro Tyr Arg Cys Met Val 195 Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Chan Tyr				Δla	Ara	Glv	Ara	Δla	T.eu	Pro	Δla	Ser	Glv	Lvs	Ala	Glu
Arg Ala Arg Gly Ser Ala Xaa Gly Ser Ala Ala Arg Gly His Trp Ser 25 30 Leu Ala Arg Phe Pro Ala Pro Arg Gly Ser His Leu Pro Ala Arg Arg 35 40 40 45 Xaa Xaa Gly Arg Val Ser Thr Pro Ile Leu Arg Pro Val Ser Ser Ile 50 60 Pro Leu Ala Leu Ser Arg Glu Ser Arg Thr Ala Glu Glu Ser Ser Leu 75 60 Thr Pro Gln Pro Gln Val Gly Leu Val His Ile Met Thr Ser Phe Glu 85 90 95 Asp Ala Asp Thr Glu Glu Thr Val Thr Cys Leu Gln Met Thr Val Tyr 100 His Pro Gly Gln Leu Gln Cys Gly Ile Phe Gln Ser Ile Ser Phe Ass 125 Arg Glu Lys Leu Pro Ser Ser Glu Val Val Lys Phe Gly Arg Asn Ser 130 Asn Ile Cys His Tyr Thr Phe Gln Asp Lys Gln Val Ser Arg Val Gln 140 Asn Ile Cys His Tyr Thr Phe Gln Asp Lys Gln Val Ser Arg Val Gln 165 Glu Ile Lys Asn Met Ser Lys Lys Thr Asn Leu Ile Val Asp Ser Arg 180 Glu Leu Gly Tyr Leu Asn Lys Met Asp Leu Pro Tyr Arg Cys Met Val 195 Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser		•••	U-1		_	,	9							-,-		1
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Leu Ala Arg Phe Pro Ala Pro Arg Gly Ser His Leu Pro Ala Arg Arg Arg Arg 35	Ara	Δ1 a	Ara	Gly	Sor	Al a	Yaa	Glv	Sor	۸lə	Δla	Ara	Glv	Hic	Trn	Ser
Leu Ala Arg Phe Pro Ala Pro Arg Gly Ser His Leu Pro Ala Arg Arg 45 Xaa Xaa Gly Arg Val Ser Thr Pro Ile Leu Arg Pro Val Ser Ser Ile 50 Pro Leu Ala Leu Ser Arg Glu Ser Arg Thr Ala Glu Glu Ser Ser Leu 70 Thr Pro Gln Pro Gln Val Gly Leu Val His Ile Met Thr Ser Phe Glu 85 Asp Ala Asp Thr Glu Glu Thr Val Thr Cys Leu Gln Met Thr Val Tyr 110 His Pro Gly Gln Leu Gln Cys Gly Ile Phe Gln Ser Ile Ser Phe Asr 125 Arg Glu Lys Leu Pro Ser Ser Glu Val Val Lys Phe Gly Arg Asn Ser 130 Asn Ile Cys His Tyr Thr Phe Gln Asp Lys Gln Val Ser Arg Val Glr 165 Phe Ser Leu Gln Leu Phe Lys Lys Phe Asn Ser Ser Val Leu Ser Phe 165 Glu Ile Lys Asn Met Ser Lys Lys Thr Asn Leu Ile Val Asp Ser Arg 180 Glu Leu Gly Tyr Leu Asn Lys Met Asp Leu Pro Tyr Arg Cys Met Val 195 Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser Arg Phe Gly Glu Tyr Gln Phe Lys Met Asp Leu Pro Tyr Arg Gy Glu Fu Phe Gly Glu Tyr Gln Phe Gly Gly Tyr Leu Asp Lys Met Asp Leu Pro Tyr Arg Gy Glu Fu Phe Gly Gly Glu Fu Phe Gly Gly Gly Fu Phe G	9	nzu	ALY		361	ALG	naa	GLY		NIG	niu	nry	CLI		P	JCI
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Xaa Xaa Gly Arg Val Ser Thr Pro Ile Leu Arg Pro Val Ser Ser Ile 50			•	5 1.				•			•••	-	D		.	
Axaa Xaa Gly Arg Val Ser Thr Pro Ile Leu Arg Pro Val Ser Ser Ile 50	Leu	Ala		Pne	Pro	АТА	PIO		GIY	ser	HIS	Leu		AIG	Arg	Arc
Pro Leu Ala Leu Ser Arg Glu Ser Arg Thr Ala Glu Glu Ser Ser Leu 65 70 86 Thr Pro Gln Pro Gln Val Gly Leu Val His Ile Met Thr Ser Phe Glu 85 90 95 Asp Ala Asp Thr Glu Glu Thr Val Thr Cys Leu Gln Met Thr Val Tyr 110 110 110 110 110 110 110 110 110 11			35					40					45			
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Asp Ala Asp Thr Glu Glu Thr Val Thr Cys Leu Gln Met Thr Val Tyr 110 His Pro Gly Gln Leu Gln Cys Gly Ile Phe Gln Ser Ile Ser Phe Asr 115 Arg Glu Lys Leu Pro Ser Ser Glu Val Val Lys Phe Gly Arg Asn Ser 130 Asn Ile Cys His Tyr Thr Phe Gln Asp Lys Gln Val Ser Arg Val Glr 155 Phe Ser Leu Gln Leu Phe Lys Lys Phe Asn Ser Ser Val Leu Ser Phe 165 Glu Ile Lys Asn Met Ser Lys Lys Thr Asn Leu Ile Val Asp Ser Arg 190 Glu Leu Gly Tyr Leu Asn Lys Met Asp Leu Pro Tyr Arg Cys Met Val 195 Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser	65					70					75					80
Asp Ala Asp Thr Glu Glu Thr Val Thr Cys Leu Gln Met Thr Val Tyr 110 His Pro Gly Gln Leu Gln Cys Gly Ile Phe Gln Ser Ile Ser Phe Asr 115 Arg Glu Lys Leu Pro Ser Ser Glu Val Val Lys Phe Gly Arg Asn Ser 130 Asn Ile Cys His Tyr Thr Phe Gln Asp Lys Gln Val Ser Arg Val Glr 155 Phe Ser Leu Gln Leu Phe Lys Lys Phe Asn Ser Ser Val Leu Ser Phe 165 Glu Ile Lys Asn Met Ser Lys Lys Thr Asn Leu Ile Val Asp Ser Arg 190 Glu Leu Gly Tyr Leu Asn Lys Met Asp Leu Pro Tyr Arg Cys Met Val 195 Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser																
Asp Ala Asp Thr Glu Glu Thr Val Thr Cys Leu Gln Met Thr Val Tyr 100 105 110 110 110 110 110 110 110 110	Thr	Pro	Gln	Pro	Gln	Val	Gly	Leu	Val	His	Ile	Met	Thr	Ser	Phe	Glu
His Pro Gly Gln Leu Gln Cys Gly Ile Phe Gln Ser Ile Ser Phe Associated Phe Ileu Pro Ser Ser Glu Val Val Lys Phe Gly Arg Asn Ser Ila Ser Ile Ser Phe Associated Phe Ilas Tyr Thr Phe Gln Asp Lys Gln Val Ser Arg Val Gla Ilas Ile Cys His Tyr Thr Phe Gln Asp Lys Gln Val Ser Arg Val Gla Ilas Ile Cys His Tyr Thr Phe Ilas Ilas Ileu Ser Phe Ilas Ilas Ileu Ileu Phe Ilas Ilas Ileu Ileu Ser Phe Ilas Ilas Ileu Ileu Phe Ilas Ilas Ileu Ileu Val Asp Ser Arg Ilas Ilas Ileu Ileu Val Asp Ser Arg Ilas Ilas Ilas Ileu Ileu Val Asp Ser Arg Ilas Ilas Ileu Ileu Ileu Val Asp Ser Arg Ilas Ileu Ileu Ileu Ileu Val Ileu Ileu Ileu Val Ileu Ileu Ileu Ileu Ileu Ileu Ileu Ile					85					90					95	
His Pro Gly Gln Leu Gln Cys Gly Ile Phe Gln Ser Ile Ser Phe Associated Phe Ileu Pro Ser Ser Glu Val Val Lys Phe Gly Arg Asn Ser Ila Ser Ile Ser Phe Associated Phe Ilas Tyr Thr Phe Gln Asp Lys Gln Val Ser Arg Val Gla Ilas Ile Cys His Tyr Thr Phe Gln Asp Lys Gln Val Ser Arg Val Gla Ilas Ile Cys His Tyr Thr Phe Ilas Ilas Ileu Ser Phe Ilas Ilas Ileu Ileu Phe Ilas Ilas Ileu Ileu Ser Phe Ilas Ilas Ileu Ileu Phe Ilas Ilas Ileu Ileu Val Asp Ser Arg Ilas Ilas Ileu Ileu Val Asp Ser Arg Ilas Ilas Ilas Ileu Ileu Val Asp Ser Arg Ilas Ilas Ileu Ileu Ileu Val Asp Ser Arg Ilas Ileu Ileu Ileu Ileu Val Ileu Ileu Ileu Val Ileu Ileu Ileu Ileu Ileu Ileu Ileu Ile																
His Pro Gly Gln Leu Gln Cys Gly Ile Phe Gln Ser Ile Ser Phe Associated Phe Ileu Pro Ser Ser Glu Val Val Lys Phe Gly Arg Asn Ser Ile Ser Phe Associated Phe Ileu Pro Ser Ser Glu Val Val Lys Phe Gly Arg Asn Ser Ile Cys His Tyr Thr Phe Gln Asp Lys Gln Val Ser Arg Val Gla Ileu Phe Ileu Phe Lys Lys Phe Asn Ser Ser Val Leu Ser Phe Ileu Ile Val Asp Ser Arg Ileu Ile Val Asp Ser Arg Ileu Ileu Phe Ileu Phe Ileu Phe Ileu Pro Tyr Arg Cys Met Val Ileu Phe Ileu Phe Ileu Met Glu Lys Glu Asp Gly Glu Ser Ileu Phe Ileu Met Glu Lys Glu Asp Gly Glu Ser Ileu Phe Ileu Met Glu Lys Glu Asp Gly Glu Ser Ileu Phe Ileu Met Glu Lys Glu Asp Gly Glu Ser Ileu Phe Ileu Met Glu Lys Glu Asp Gly Glu Ser Ileu Phe Ileu Met Glu Lys Glu Asp Gly Glu Ser Ileu Phe Ileu Met Glu Lys Glu Asp Gly Glu Ser Ileu Phe Ileu Met Glu Lys Glu Asp Gly Glu Ser Ileu Phe Ileu Met Glu Lys Glu Asp Gly Glu Ser Ileu Phe Ileu Met Glu Lys Glu Asp Gly Glu Ser Ileu Phe Ileu Met Glu Lys Glu Asp Gly Glu Ser Ileu Phe Ileu Met Glu Lys Glu Asp Gly Glu Ser Ileu Phe Ileu Met Glu Lys Glu Asp Gly Glu Ser Ileu Phe Ileu Met Glu Lys Glu Asp Gly Glu Ser Ileu Phe Ileu Met Glu Lys Glu Asp Gly Glu Ser Ileu Phe Ileu Met Glu Lys Glu Asp Gly Glu Ser Ileu Phe Ileu Phe Ileu Met Glu Lys Glu Asp Gly Glu Ser Ileu Phe	Asp	Ala	Asp	Thr	Glu	Glu	Thr	Val	Thr	Cys	Leu	Gln	Met	Thr	Val	Tyr
Arg Glu Lys Leu Pro Ser Ser Glu Val Val Lys Phe Gly Arg Asn Ser 130 Asn Ile Cys His Tyr Thr Phe Gln Asp Lys Gln Val Ser Arg Val Glr 155 Phe Ser Leu Gln Leu Phe Lys Lys Phe Asn Ser Ser Val Leu Ser Phe 165 Glu Ile Lys Asn Met Ser Lys Lys Thr Asn Leu Ile Val Asp Ser Arg 180 Glu Leu Gly Tyr Leu Asn Lys Met Asp Leu Pro Tyr Arg Cys Met Val 195 Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser			_	100					105	_				110		-
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Arg Glu Lys Leu Pro Ser Ser Glu Val Val Lys Phe Gly Arg Asn Ser 130 Asn Ile Cys His Tyr Thr Phe Gln Asp Lys Gln Val Ser Arg Val Glr 155 Phe Ser Leu Gln Leu Phe Lys Lys Phe Asn Ser Ser Val Leu Ser Phe 165 Glu Ile Lys Asn Met Ser Lys Lys Thr Asn Leu Ile Val Asp Ser Arg 180 Glu Leu Gly Tyr Leu Asn Lys Met Asp Leu Pro Tyr Arg Cys Met Val 195 Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser	His	Pro	Gly	Gln	Leu	Gln	Cys	Gly	Ile	Phe	Gln	Ser	Ile	Ser	Phe	Asn
Arg Glu Lys Leu Pro Ser Ser Glu Val Val Lys Phe Gly Arg Asn Ser 130 Asn Ile Cys His Tyr Thr Phe Gln Asp Lys Gln Val Ser Arg Val Glr 155 Phe Ser Leu Gln Leu Phe Lys Lys Phe Asn Ser Ser Val Leu Ser Phe 165 Glu Ile Lys Asn Met Ser Lys Lys Thr Asn Leu Ile Val Asp Ser Arg 180 Glu Leu Gly Tyr Leu Asn Lys Met Asp Leu Pro Tyr Arg Cys Met Val 195 Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser			-					_								
Asn Ile Cys His Tyr Thr Phe Gln Asp Lys Gln Val Ser Arg Val Gln 145 Phe Ser Leu Gln Leu Phe Lys Lys Phe Asn Ser Ser Val Leu Ser Phe 165 The Lys Asn Met Ser Lys Lys Thr Asn Leu Ile Val Asp Ser Arg 180 Glu Ile Lys Asn Met Ser Lys Lys Thr Asn Leu Ile Val Asp Ser Arg 180 Glu Leu Gly Tyr Leu Asn Lys Met Asp Leu Pro Tyr Arg Cys Met Val 195 Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser																
Asn Ile Cys His Tyr Thr Phe Gln Asp Lys Gln Val Ser Arg Val Gln 145 Phe Ser Leu Gln Leu Phe Lys Lys Phe Asn Ser Ser Val Leu Ser Phe 165 The Lys Asn Met Ser Lys Lys Thr Asn Leu Ile Val Asp Ser Arg 180 Glu Ile Lys Asn Met Ser Lys Lys Thr Asn Leu Ile Val Asp Ser Arg 180 Glu Leu Gly Tyr Leu Asn Lys Met Asp Leu Pro Tyr Arg Cys Met Val 195 Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser	Ara	G] 11	T.vs	T.eu	Pro	Ser	Ser	Glu	Va 1	Val	Lvs	Phe	Glv	Ara	Asn	Ser
Asn Ile Cys His Tyr Thr Phe Gln Asp Lys Gln Val Ser Arg Val Gln 150 155 166 Phe Ser Leu Gln Leu Phe Lys Lys Phe Asn Ser Ser Val Leu Ser Phe 165 170 175 Glu Ile Lys Asn Met Ser Lys Lys Thr Asn Leu Ile Val Asp Ser Arg 180 185 190 Glu Leu Gly Tyr Leu Asn Lys Met Asp Leu Pro Tyr Arg Cys Met Val 195 200 205	9		2,5						· u _		2,0		0-1			
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Phe Ser Leu Gln Leu Phe Lys Lys Phe Asn Ser Ser Val Leu Ser Phe 165 170 175 Glu Ile Lys Asn Met Ser Lys Lys Thr Asn Leu Ile Val Asp Ser Arg 180 185 190 Glu Leu Gly Tyr Leu Asn Lys Met Asp Leu Pro Tyr Arg Cys Met Val 195 200 205 Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser		T10	C***C	uio	m	mb~	Pho	C1-	700	T vec	Cln	t/a1	Sar	Ara	Val	G1 n
Phe Ser Leu Gln Leu Phe Lys Lys Phe Asn Ser Ser Val Leu Ser Phe 165 170 175 Glu Ile Lys Asn Met Ser Lys Lys Thr Asn Leu Ile Val Asp Ser Arg 180 185 190 Glu Leu Gly Tyr Leu Asn Lys Met Asp Leu Pro Tyr Arg Cys Met Val 195 200 205 Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser		116	Cys	птэ	TÄT		riie	GIII	Asp	гуз		val	Ser	arg	val	
165 170 175 Glu Ile Lys Asn Met Ser Lys Lys Thr Asn Leu Ile Val Asp Ser Arg 180 185 190 Glu Leu Gly Tyr Leu Asn Lys Met Asp Leu Pro Tyr Arg Cys Met Val 195 200 205 Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser	145					120					123					100
165 170 175 Glu Ile Lys Asn Met Ser Lys Lys Thr Asn Leu Ile Val Asp Ser Arg 180 185 190 Glu Leu Gly Tyr Leu Asn Lys Met Asp Leu Pro Tyr Arg Cys Met Val 195 200 205 Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser				~ 1-			-	-					**- 1	•	.	-
Glu Ile Lys Asn Met Ser Lys Lys Thr Asn Leu Ile Val Asp Ser Arc 180 185 190 Glu Leu Gly Tyr Leu Asn Lys Met Asp Leu Pro Tyr Arg Cys Met Val 195 200 205 Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser	rne	ser	Leu	GIn		Pne	rAa	rys	Pne		ser	ser	var	ren		Pue
180 185 190 Glu Leu Gly Tyr Leu Asn Lys Met Asp Leu Pro Tyr Arg Cys Met Val 195 200 205 Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser					162					170					1/5	
180 185 190 Glu Leu Gly Tyr Leu Asn Lys Met Asp Leu Pro Tyr Arg Cys Met Val 195 200 205 Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser	_													_		
Glu Leu Gly Tyr Leu Asn Lys Met Asp Leu Pro Tyr Arg Cys Met Val 195 200 205 Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser	Glu	Ile	Lys	Asn	Met	Ser	Lys	Lys		Asn	Leu	Ile	Val		Ser	Arg
195 200 205 Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser				180					185					190		
195 200 205 Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser																
Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Se	3lu	Leu	Gly	Tyr	Leu	Asn	Lys	Met	Asp	Leu	Pro	Tyr	Arg	Cys	Met	Val
			195					200					205			
210 215 220	۱rg	Phe	Gly	Glu	Tyr	Gln	Phe	Leu	Met	Glu	Lys	Glu	Asp	Gly	Glu	Ser
		210					215					220				

Leu Glu Phe Phe Glu Thr Gln Phe Ile Leu Ser Pro Arg Ser Leu Leu 225 230 235 Gln Glu Asn Asn Trp Pro Pro His Arg Pro Ile Pro Glu Tyr Gly Thr 250 Tyr Ser Leu Cys Ser Ser Gln Ser Ser Ser Pro Thr Glu Met Asp Glu 265 Asn Glu Ser 275 <210> 1295 <211> 677 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (144) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (161) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1295 Met Thr Arg Leu Pro Lys Leu Trp Ala Arg Pro Ala Gly Lys Ala Leu 5 15 Val Ser Pro Val Val Gln Asn Ile Thr Ser Pro Asp Glu Asp Gly Ile Ser Pro Leu Gly Trp Leu Leu Asp Gln Tyr Leu Glu Cys Gln Glu Ala 40 Val Phe Asn Pro Gln Ser Arg Gly Pro Ala Phe Phe Ser Arg Val Arg 50 55 Arg Leu Thr His Leu Leu Val His Val Glu Pro Cys Glu Ala Pro Pro Pro Val Val Ala Thr Pro Arg Pro Lys Gly Arg Asn Arg Ser His Asp 90

Trp Ser Ser Leu Ala Thr Arg Gly Leu Pro Ser Ser Ile Met Arg Asn

105

Leu	Thr	Arg 115	Cys	Trp	Arg	Ala	Val 120	Val	Glu	Lys	Gln	Val 125	Asn	Asn	Phe
Leu	Thr 130	Ser	Ser	Trp	Arg	Asp 135	Asp	Asp	Phe	Val	Pro 140	Arg	Tyr	Cys	Xaa
His 145	Phe	Asn	Ile	Leu	Gln 150	Asn	Ser	Ser	Ser	Glu 155	Leu	Phe	Gly	Pro	Arg 160
Хаа	Ala	Phe	Leu	Leu 165	Ala	Leu	Gln	Asn	Gly 170	Суз	Ala	Gly	Ala	Leu 175	Let
Lys	Leu	Pro	Phe 180	Leu	Lys	Ala	Ala	His 185	Val	Ser	Glu	Gln	Phe 190	Ala	Arc
His	Ile	Asp 195	Gln	Gln	Ile	Gln	Gly 200	Ser	Arg	Ile	Gly	Gly 205	Ala	Gln	Glu
Met	Glu 210	Arg	Leu	Ala	Gln	Leu 215	Gln	Gln	Суз	Leu	Gln 220	Ala	Val	Leu	Ile
Phe 225	Ser	Gly	Leu	Glu	Ile 230	Ala	Thr	Thr	Phe	Glu 235	His	Tyr	Tyr	Gln	His 240
Tyr	Met	Ala	Asp	Arg 245	Leu	Leu	Gly	Val	Val 250	Ser	Ser	Trp	Leu	G1u 255	Gly
Ala	Val	Leu	Glu 260	Gln	Ile	Gly	Pro	Cys 265	Phe	Pro	Asn	Arg	Leu 270	Pro	Glr
Gln	Met	Leu 275	Gln	Ser	Leu	Ser	Thr 280	Ser	Lys	Glu	Leu	Gln 285	Arg	Gln	Phe
	290				Gln	295					300				
305					Ile 310					315					320
His	Lys	Ser	Glu	Lys 325	Glu	Glu	Glu	Ala	Gly 330	Ala	Ala	Ala	Val	Val 335	Asp
Val	Ala	Glu	Gly 340	Glu	Glu	Glu	Glu	Glu 345	Glu	Asn	Glu	Asp	Leu 350	Tyr	Туг
Glu	Gly	Ala 355	Met	Pro	Glu	Val	Ser 360	Val	Leu	Val	Leu	Ser 365	Arg	His	Ser
Trp	Pro 370	Val	Ala	Ser	Ile	Cys 375	His	Thr	Leu	Asn	Pro 380	Arg	Thr	Cys	Leu

385	ser	туг	reu	AIG	390	Thi	reu	ASN	Arg	395	ser	ASN	Pne	туг	400
Lys	Ser	Gln	Ser	His 405	Pro	Ala	Leu	Glu	Arg 410	Gly	Ser	Gln	Arg	Arg 415	Leu
Gln	Trp	Thr	Trp 420	Leu	Gly	Trp	Ala	Glu 425	Leu	Gln	Phe	Gly	Asn 430	Gln	Thr
Leu	His	Val 435	Ser	Thr	Val	Gln	Met 440	Trp	Leu	Leu	Leu	Tyr 445	Leu	Asn	Asp
	450				Val	455					460				
465					Gln 470					475					480
				485	Glu				490					495	
		Ī	500		Lys			505			-		510		
		515			Thr		520					525			
	530		•		Arg	535				-	540				
545	_				550					555					560
				565	Trp				570					575	
			580		Leu			585					590		
		595			Leu		600					605			
	610				Leu	615					620				
625					630 Leu					635					640
oc u	1111	£ 116	.1.7.3	645	750	3111	116	ary	650	ary	1	741		655	ara

PCT/US00/05882

Ser Cys Thr Ala Thr Gln Ser Phe Ser Thr Ser Gly Ser Pro Arg Leu 660 665 670

Gly Val Arg Gly Arg 675

WO 00/55350

<210> 1296

<211> 578

<212> PRT

<213> Homo sapiens

<400> 1296

Gly Thr Arg Glu Gly Ala Arg Val Gly Gly Ala Arg Gly Gly Arg Asp 1 5 10 15

Gly Arg Lys Met Ala Thr Ala Thr Ile Ala Leu Gln Val Asn Gly Gln 20 25 30

Gln Gly Gly Ser Glu Pro Ala Ala Ala Ala Ala Val Val Ala Ala 35 40 45

Gly Asp Lys Trp Lys Pro Pro Gln Gly Thr Asp Ser Ile Lys Met Glu 50 60

Asn Gly Gln Ser Thr Ala Ala Lys Leu Gly Leu Pro Pro Leu Thr Pro 65 70 75 80

Glu Gln Gln Glu Ala Leu Gln Lys Ala Lys Lys Tyr Ala Met Glu Gln 85 90 95

Ser Ile Lys Ser Val Leu Val Lys Gln Thr Ile Ala His Gln Gln Gln 100 105 110

Gln Leu Thr Asn Leu Gln Met Ala Ala Val Thr Met Gly Phe Gly Asp 115 120 125

Pro Leu Ser Pro Leu Gln Ser Met Ala Ala Gln Arg Gln Arg Ala Leu 130 135 140

Ala Ile Met Cys Arg Val Tyr Val Gly Ser Ile Tyr Tyr Glu Leu Gly 145 150 155 160

Glu Asp Thr Ile Arg Gln Ala Phe Ala Pro Phe Gly Pro Ile Lys Ser 165 170 175

Ile Asp Met Ser Trp Asp Ser Val Thr Met Lys His Lys Gly Phe Ala 180 185 190

Phe Val Glu Tyr Glu Val Pro Glu Ala Ala Gln Leu Ala Leu Glu Gln

		195					200					205			
Met	Asn 210		Val	Met	Leu	Gly 215		Arg	Asn	Ile	Lys 220		Gly	Arg	Pro
Ser 225	Asn	Ile	Gly	Gln	Ala 230	Gln	Pro	Ile	Ile	Asp 235	Gln	Leu	Ala	Glu	Glu 240
Ala	Arg	Ala	Phe	Asn 245	Arg	Ile	Tyr	Val	Ala 250		Val	His	Gln	Asp 255	Leu
Ser	Asp	Asp	Asp 260	Ile	Lys	Ser	Val	Phe 265	Glu	Ala	Phe	Gly	Lys 270	Ile	Lys
Ser	Cys	Thr 275	Leu	Ala	Arg	Asp	Pro 280	Thr	Thr	Gly	Lys	His 285	Lys	Gly	Tyr
Gly	Phe 290	Ile	Glu	Tyr	Glu	Lys 295	Ala	Gln	Ser	Ser	Gln 300	Asp	Ala	Val	Ser
Ser 305	Met	Asn	Leu	Phe	Asp 310	Leu	Gly	Gly	Gln	Tyr 315	Leu	Arg	Val	Gly	Lys 320
Ala	Val	Thr	Pro	Pro 325	Met	Pro	Leu	Leu	Thr 330	Pro	Ala	Thr	Pro	Gly 335	Gly
Leu	Pro	Pro	Ala 340	Ala	Ala	Val	Ala	Ala 345	Ala	Ala	Ala	Thr	Ala 350	Lys	Ile
Thr	Ala	Gln 355	Glu	Ala	Val	Ala	Gly 360	Ala	Ala	Val	Leu	Gly 365	Thr	Leu	Gly
Thr	Pro 370	Gly	Leu	Val	Ser	Pro 375	Ala	Leu	Thr	Leu	Ala 380	Gln	Pro	Leu	Gly
Thr 385	Leu	Pro	Gln	Ala	Val 390	Met	Ala	Ala	Gln	Ala 395	Pro	Gly	Val		Thr 400
Gly	Val	Thr	Pro	Ala 405	Arg	Pro	Pro	Ile	Pro 410	Val	Thr	Ile	Pro	Ser 415	Val
3ly	Val	Val	Asn 420	Pro	Ile	Leu	Ala	Ser 425	Pro	Pro	Thr	Leu	Gly 430	Leu	Leu
3lu	Pro	Lys 435	Lys	Glu	Lys	Glu	Glu 440	Glu	Glu	Leu	Phe	Pro 445	Glu	Ser	Glu
Arg	Pro 450	Glu	Met	Leu	Ser	Glu 455	Gln	Glu	His	Met	Ser 460	Ile	Ser	Gly	Ser
Ser	Ala	Arg	His	Met	Val	Met	Gln	Lys	Leu	Leu	Arg	Lys	Gln	Glu	Ser

465 470 475 480 Thr Val Met Val Leu Arg Asn Met Val Asp Pro Lys Asp Ile Asp Asp 485 490 Asp Leu Glu Gly Glu Val Thr Glu Glu Cys Gly Lys Phe Gly Ala Val 505 Asn Arg Val Ile Ile Tyr Gln Glu Lys Gln Gly Glu Glu Asp Ala 520 Glu Ile Ile Val Lys Ile Phe Val Glu Phe Ser Ile Ala Ser Glu Thr 535 His Lys Ala Ile Gln Ala Leu Asn Gly Arg Trp Phe Ala Gly Arg Lys 550 555 Val Val Ala Glu Val Tyr Asp Gln Glu Arg Phe Asp Asn Ser Asp Leu 570 Ser Ala <210> 1297 <211> 179 <212> PRT <213> Homo sapiens Pro Arg Gly Thr Ser Arg Arg Ser Ala Trp Pro Lys Met Ala Ala Ser Val Cys Ser Gly Leu Leu Gly Pro Arg Val Leu Ser Trp Ser Arg Glu 25 Leu Pro Cys Ala Trp Arg Ala Leu His Thr Ser Pro Val Cys Ala Lys 40 Asn Arg Ala Ala Arg Val Arg Val Ser Lys Gly Asp Lys Pro Val Thr Tyr Glu Glu Ala His Ala Pro His Tyr Ile Ala His Arg Lys Gly Trp 65 Leu Ser Leu His Thr Gly Asn Leu Asp Gly Glu Asp His Ala Ala Glu

Arg Thr Val Glu Asp Val Phe Leu Arg Lys Phe Met Trp Gly Thr Phe

105

130

Pro Gly Cys Leu Ala Asp Gln Leu Val Leu Lys Arg Arg Gly Asn Gln 120 Leu Glu Ile Cys Ala Val Val Leu Arg Gln Leu Ser Pro His Lys Tyr 135 Tyr Phe Leu Val Gly Tyr Ser Glu Thr Leu Leu Ser Tyr Phe Tyr Lys 150 155 Cys Pro Val Arg Leu His Leu Gln Thr Val Pro Ser Lys Val Val Tyr 165 170 Lys Tyr Leu <210> 1298 <211> 155 <212> PRT <213> Homo sapiens <400> 1298 Gly Leu Val Thr Ile Phe Gly Cys Pro Ser Arg Glu Lys Gly Arg Met Pro Leu Glu Ser Ser Ser Ser Met Pro Leu Ser Phe Pro Ser Leu Leu 25 Pro Ser Val Pro His Asn Thr Asn Pro Ser Pro Pro Leu Met Ser Tyr 35 40 Ile Thr Ser Gln Glu Met Lys Cys Ile Leu His Trp Phe Ala Asn Trp Ser Gly Pro Gln Arg Glu Arg Phe Leu Glu Asp Leu Val Ala Lys Ala Val Pro Glu Lys Leu Gln Pro Leu Leu Asp Ser Leu Glu Gln Leu Ser Val Ser Gly Ala Asp Arg Pro Pro Ser Ile Phe Glu Cys Gln Leu His Leu Trp Asp Gln Trp Phe Arg Gly Trp Ala Glu Gln Glu Arg Asn Glu

120

135

Phe Val Arg Gln Leu Glu Phe Ser Glu Pro Asp Phe Val Ala Lys Phe

Tyr Gln Ala Val Ala Ala Thr Ala Gly Lys Asp 145 150 155

<210> 1299

<211> 449

<212> PRT

<213> Homo sapiens

<400> 1299

Ser Asn Arg Lys Phe Ile Pro His Gln Leu Leu Val Ala Ile Asp Leu 1 5 10 15

Leu Ala Arg Gln Ala Val Arg Tyr Ile Asn Glu Asn Leu Ile Val Asn 20 25 30

Thr Asp Glu Leu Gly Arg Asp Cys Leu Ile Asn Ala Ala Lys Thr Ser 35 40 45

Met Ser Ser Lys Ile Ile Gly Ile Asn Gly Asp Phe Phe Ala Asn Met 50 55 60

Val Val Asp Ala Val Leu Ala Ile Lys Tyr Thr Asp Ile Arg Gly Gln 65 70 75 80

Pro Arg Tyr Pro Val Asn Ser Val Asn Ile Leu Lys Ala His Gly Arg 85 90 95

Ser Gln Met Glu Ser Met Leu Ile Ser Gly Tyr Ala Leu Asn Cys Val 100 105 110

Val Gly Ser Gln Gly Met Pro Lys Arg Ile Val Asn Ala Lys Ile Ala 115 120 125

Cys Leu Asp Phe Ser Leu Gln Lys Thr Lys Met Lys Leu Gly Val Gln 130 135 140

Val Val Ile Thr Asp Pro Glu Lys Leu Asp Gln Ile Arg Gln Arg Glu 145 150 155 160

Ser Asp Ile Thr Lys Glu Arg Ile Gln Lys Ile Leu Ala Thr Gly Ala 165 170 175

Asn Val Ile Leu Thr Thr Gly Gly Ile Asp Asp Met Cys Leu Lys Tyr 180 185 190

Phe Val Glu Ala Gly Ala Met Ala Val Arg Arg Val Leu Lys Arg Asp 195 200 205

Leu Lys Arg Ile Ala Lys Ala Ser Gly Ala Thr Ile Leu Ser Thr Leu

	210					215					220				
Ala 225	Asn	Leu	Glu	Gly	Glu 230	Glu	Thr	Phe	Glu	Ala 235	Ala	Met	Leu	Gly	Glr 240
Ala	Glu	Glu	Val	Val 245	Gln	Glu	Arg	Ile	Cys 250	Asp	Asp	Glu	Leu	Ile 255	Leu
Ile	Lys	Asn	Thr 260	Lys	Ala	Arg	Thr	Ser 265	Ala	Ser	Ile	Ile	Leu 270	Arg	Gly
Ala	Asn	Asp 275	Phe	Met	Cys	Asp	Glu 280	Met	Glu	Arg	Ser	Leu 285	His	Asp	Ala
Leu	Суз 290	Val	Val	Lys	Arg	Val 295	Leu	Glu	Ser	Lys	ser 300	Val	Val	Pro	Gly
Gly 305	Gly	Ala	Val	Glu	Ala 310	Ala	Leu	Ser	Ile	Туг 315	Leu	Glu	Asn	Tyr	Ala 320
Thr	Ser	Met	Gly	Ser 325	Arg	Glu	Gln	Leu	Ala 330	Ile	Ala	Glu	Phe	Ala 335	Arg
Ser	Leu	Leu	Val 340	Ile	Pro	Asn	Thr	Leu 345	Ala	Val	Asn	Ala	Ala 350	Gln	Asp
Ser	Thr	Asp 355	Leu	Val	Ala	Lys	Leu 360	Arg	Ala	Phe	His	Asn 365	Glu	Ala	Gln
Val	Asn 370	Pro	Glu	Arg	Lys	Asn 375	Leu	Lys	Trp	Ile	Gly 380	Leu	Asp	Leu	Ser
Asn 385	Gly	Lys	Pro	Arg	Asp 390	Asn	Lys	Gln	Ala	Gly 395	Val	Phe	Glu	Pro	Thr 400
Ile	Val	Lys	Val	Lys 405	Ser	Leu	Lys	Phe	Ala 410	Thr	Glu	Ala	Ala	Ile 415	Thr
Ile	Leu	Arg	Ile 420	Asp	Asp	Leu	Ile	Lys 425	Leu	His	Pro	Glu	Ser 430	Lys	Asp
Asp	Lys	His 435	Gly	Ser	Tyr	Glu	Asp 440	Ala	Val	His	Ser	Gly 445	Ala	Leu	Asn

<210> 1300 <211> 96

Asp

<212> PRT

<213> Homo sapiens

<400> 1300

Leu Met Phe Tyr Val Leu Phe Trp Thr Leu Ser Ser Cys Lys Asn Phe 1 5 10 15

Tyr Lys Asn Cys Phe Leu His Pro Cys Gly Ala Tyr Ser Ser Glu Pro 20 25 30

Ser Pro Gln Ser Gln Cys Leu Cys Phe Leu Phe Tyr Phe Cys Ser Ile 35 40 45

Arg Phe Leu Leu Leu Cys Leu Lys Ser Ser Leu Gly Ser Tyr Gln 50 55

Gly Phe Ser Phe Cys Val Ala Phe Ala Ala Trp Ile Lys His Trp Leu 65 70 75 80

Thr Val Leu Met Cys Glu Glu Lys Lys Phe Ser Lys Ala Gly Glu Leu 85 90 95

<210> 1301

<211> 332

<212> PRT

<213> Homo sapiens

<400> 1301

Gly Glu Pro Lys Met Thr Gly Ser Asn Glu Phe Lys Leu Asn Gln Pro 1 5 10 15

Pro Glu Asp Gly Ile Ser Ser Val Lys Phe Ser Pro Asn Thr Ser Gln 20 25 30

Phe Leu Leu Val Ser Ser Trp Asp Thr Ser Val Arg Leu Tyr Asp Val 35 40 45

Pro Ala Asn Ser Met Arg Leu Lys Tyr Gln His Thr Gly Ala Val Leu 50 55 60

Asp Cys Ala Phe Tyr Asp Pro Thr His Ala Trp Ser Gly Gly Leu Asp 65 70 75 80

His Gln Leu Lys Met His Asp Leu Asn Thr Asp Gln Glu Asn Leu Val 85 90 95

Gly	Thr	His	Asp 100		Pro	Ile	Arg	Cys 105		Glu	Tyr	Cys	Pro 110	Glu	Val
Asn	Val	Met 115		Thr	Gly	Ser	Trp 120		Gln	Thr	Val	Lys 125		Trp	Asp
Pro	Arg 130		Pro	Cys	Asn	Ala 135		Thr	Phe	Ser	Gln 140	Pro	Glu	Lys	Val
Туг 145	Thr	Leu	Ser	Val	Ser 150	Gly	Asp	Arg	Leu	Ile 155	Val	Gly	Thr	Ala	Gly 160
Arg	Arg	Val	Leu	Val 165	Trp	Asp	Leu	Arg	Asn 170	Met	Gly	Tyr	Val	Gln 175	Gln
Arg	Arg	Glu	Ser 180	Ser	Leu	Lys	Tyr	Gln 185	Thr	Arg	Cys	Ile	Arg 190	Ala	Phe
Pro	Asn	Lys 195	Gln	Gly	Tyr	Val	Leu 200	Ser	Ser	Ile	Glu	Gly 205	Arg	Val	Ala
Val	Glu 210	Tyr	Leu	Asp	Pro	Ser 215	Pro	Glu	Val	Gln	Lys 220	Lys	Lys	Tyr	Ala
Phe 225	Lys	Cys	His	Arg	Leu 230	Lys	Glu	Asn	Asn	Ile 235	Glu	Gln	Ile	Tyr	Pro 240
Val	Asn	Ala	Ile	Ser 245	Phe	His	Asn	Ile	His 250	Asn	Thr	Phe	Ala	Thr 255	Gly
Gly	Ser	Asp	Gly 260	Phe	Val	Asn	Ile	Trp 265	Asp	Pro	Phe	Asn	Lys 270	Lys	Arg
Leu	Cys	Gln 275	Phe	His	Arg	Tyr	Pro 280	Thr	Ser	Ile	Ala	Ser 285	Leu	Ala	Phe
Ser	Asn 290	Asp	Gly	Thr	Thr	Leu 295	Ala	Ile	Ala	Ser	Ser 300	Tyr	Met	Tyr	Glu
Met 305	Asp	Asp	Thr	Glu	His 310	Pro	Glu	Asp	Gly	11e 315	Phe	Ile	Arg	Gln	Val 320
Thr	Asp	Ala	Glu	Thr 325	Lys	Pro	Lys	Ser	Pro 330	Cys	Thr				

<210> 1302

<211> 565

<212> PRT

<213> Homo sapiens

<400)> 13	302													
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Cys	Leu	Ser	Val 20	Gln	Cys	Leu	Ser	Ala 25	Met	Lys	Ile	Ala	His 30	Arg	Gly
Pro	Asp	Ala 35	Phe	Arg	Phe	Glu	Asn 40	Val	Asn	Gly	Tyr	Thr 45	Asn	Cys	Cys
Phe	Gly 50	Phe	His	Arg	Leu	Ala 55	Val	Val	Asp	Pro	Leu 60	Phe	Gly	Met	Gln
Pro 65	Ile	Arg	Val	Lys	Lys 70	Tyr	Pro	Tyr	Leu	Trp 75	Leu	Cys	Tyr	Asn	Gly 80
Glu	Ile	Tyr	Asn	His 85	Lys	Lys	Met	Gln	Gln 90	His	Phe	Glu	Phe	Glu 95	Tyr
Gln	Thr	Lys	Val 100	Asp	Gly	Glu	Ile	11e 105	Leu	His	Leu	Tyr	Asp 110	Lys	Gly
Gly	Ile	Glu 115	Gln	Thr	Ile	Cys	Met 120	Leu	Asp	Gly	Val	Phe 125	Ala	Phe	Val
Leu	Leu 130	Asp	Thr	Ala	Asn	Lys 135	Lys	Val	Phe	Leu	Gly 140	Arg	Asp	Thr	Tyr
Gly 145	Val	Arg	Pro	Leu	Phe 150	Lys	Ala	Met	Thr	Glu 155	Asp	Gly	Phe	Leu	Ala 160
Val	Cys	Ser	Glu	Ala 165	Lys	Gly	Leu	Val.	Thr 170	Leu	Lys	His	Ser	Ala 175	Thr
Pro	Phe	Leu	Lys 180	Val	Glu	Pro	Phe	Leu 185	Pro	Gly	His	Tyr	Glu 190	Val	Leu
Asp	Leu	Lys 195	Pro	Asn	Gly	Lys	Val 200	Ala	ser	Val	Glu	Met 205	Val	Lys	Tyr
His	His 210	Cys	Arg	Asp	Glu	Pro 215	Leu	His	Ala	Leu	Tyr 220	Asp	Asn	Val	Glu
Lys 225	Leu	Phe	Pro	Gly	Phe 230	Glu	Ile	Glu	Thr	Val 235	Lys	Asn	Asn	Leu	Arg 240
Ile	Leu	Phe	Asn	Asn 245	Ala	Val	Lys	Lys	Arg 250	Leu	Met	Thr	Asp	Arg 255	Arg
Ile	Gly	Cys	Leu	Leu	Ser	Gly	Gly	Leu	Asp	Ser	Ser	Leu	Val	Ala	Ala

			260					265					270		
Thr	Leu	Leu 275	Lys	Gln	Leu	Lys	Glu 280	Ala	Gln	Val	Gln	Tyr 285	Pro	Leu	Gln
Thr	Phe 290	Ala	Ile	Gly	Met	Glu 295	Asp	Ser	Pro	Asp	Leu 300	Leu	Ala	Ala	Arg
Lys 305	Val	Ala	Asp	His	Ile 310	Gly	Ser	Glu	His	туг 315	Glu	Val	Leu	Phe	Asn 320
Ser	Glu	Glu	Gly	Ile 325	Gln	Ala	Leu	Asp	Glu 330	Val	Ile	Phe	Ser	Leu 335	Glu
Thr	Tyr	Asp	Ile 340	Thr	Thr	Val	Arg	Ala 345	Ser	Val	Gly	Met	Туг 350	Leu	Ile
Ser	Lys	Tyr 355	Ile	Arg	Lys	Asn	Thr 360	Asp	Ser	Val	Val	11e 365	Phe	Ser	Gly
Glu	Gly 370	Ser	Asp	Glu	Leu	Thr 375	Gln	Gly	Tyr	Ile	Tyr 380	Phe	His	Lys	Ala
Pro 385	Ser	Pro	Glu	Lys	Ala 390	Glu	Glu	Glu	Ser	Glu 395	Arg	Leu	Leu	Arg	Glu 400
Leu	Tyr	Leu	Phe	Asp 405	Val	Leu	Arg	Ala	Asp 410	Arg	Thr	Thr	Ala	Ala 415	His
Gly	Leu	Glu	Leu 420	Arg	Val	Pro	Phe	Leu 425	Asp	His	Arg	Phe	Ser 430	Ser	Tyr
Tyr	Leu	Ser 435	Leu	Pro	Pro	Glu	Met 440	Arg	Ile	Pro	Lys	Asn 445	Gly	Ile	Glu
Lys	His 450	Leu	Leu	Arg	Glu	Thr 455	Phe	Glu	Asp	Ser	Asn 460	Leu	Ile	Pro	Lys
Glu 465	Ile	Leu	Trp	Arg	Pro 470	Lys	Glu	Ala	Phe	Ser 475	Asp	Gly	Ile	Thr	Ser 480
Val	Lys	Asn	Ser	Trp 485	Phe	Lys	Ile	Leu	Gln 490	Glu	Tyr	Val	Glu	His 495	Gln
Val	Asp	Asp	Ala 500	Met	Met	Ala	Asn	Ala 505	Ala	Gln	Lys	Phe	Pro 510	Phe	Asn
Thr	Pro	Lys 515	Thr	Lys	Glu	Gly	Tyr 520	_	Tyr	Arg	Gln	Val 525	Phe	Glu	Arg
His	Tyr	Pro	Gly	Arg	Ala	Asp	Trp	Leu	Ser	His	Tyr	Trp	Met	Pro	Lys

530 535 540 Trp Ile Asn Ala Thr Asp Pro Ser Ala Arg Thr Leu Thr His Tyr Lys 545 550 555 Ser Ala Val Lys Ala 565 <210> 1303 <211> 441 <212> PRT <213> Homo sapiens <400> 1303 Arg Arg Arg Ala Cys Arg Ser Ala Glu Gly Thr Gly Leu Arg Ser Leu Leu Pro Pro Arg Leu Gln Leu Pro Ala Gly Pro Phe Ser Arg 25 Cys Arg Trp Asp Pro Val Ser Ser Pro Arg Pro Ser Thr Met Pro Pro 40 Lys Lys Gly Gly Asp Gly Ile Lys Pro Pro Pro Ile Ile Gly Arg Phe Gly Thr Ser Leu Lys Ile Gly Ile Val Gly Leu Pro Asn Val Gly Lys Ser Thr Phe Phe Asn Val Leu Thr Asn Ser Gln Ala Ser Ala Glu Asn 90 Phe Pro Phe Cys Thr Ile Asp Pro Asn Glu Ser Arg Val Pro Val Pro 100 105 Asp Glu Arg Phe Asp Phe Leu Cys Gln Tyr His Lys Pro Ala Ser Lys 115 120 Ile Pro Ala Phe Leu Asn Val Val Asp Ile Ala Gly Leu Val Lys Gly 135 Ala His Asn Gly Gln Gly Leu Gly Asn Ala Phe Leu Ser His Ile Ser 145 Ala Cys Asp Gly Ile Phe His Leu Thr Arg Ala Phe Glu Asp Asp Asp 170 Ile Thr His Val Glu Gly Ser Val Asp Pro Ile Arg Asp Ile Glu Ile 180 185

He	His	Glu 195	Glu	Leu	GIn	Leu	Lys 200	Asp	Glu	Glu	Met	205	GIÀ	Pro	116
Ile	Asp 210	Lys	Leu	Glu	Lys	Val 215	Ala	Val	Arg	Gly	Gly 220	Asp	Lys	Lys	Lev
Lys 225	Pro	Glu	Tyr	qeA	11e 230	Met	Cys	Lys	Val	Lys 235	Ser	Trp	Val	Ile	Asg 240
Gln	Lys	Lys	Pro	Val 245	Arg	Phe	Tyr	His	Asp 250	Trp	Asn	Asp	Lys	Glu 255	Ile
Glu	Val	Leu	Asn 260	Lys	His	Leu	Phe	Leu 265	Thr	Ser	Lys	Pro	Met 270	Val	Туз
Leu	Val	Asn 275	Leu	Ser	Glu	Lys	Asp 280	Tyr	Ile	Arg	Lys	Lys 285	Asn	Lys	Trp
Leu	11e 290	Lys	Ile	Lys	Glu	Trp 295	Val	Asp	Lys	Tyr	Asp 300	Pro	Gly	Ala	Leu
Val 305	Ile	Pro	Phe	Ser	Gly 310	Ala	Leu	Glu	Leu	Lys 315	Leu	Gln	Glu	Leu	Ser 320
Ala	Glu	Glu	Arg	Gln 325	Lys	Tyr	Leu	Glu	Ala 330	Asn	Met	Thr	Gln	Ser 335	Ala
Leu	Pro	Lys	Ile 340	Ile	Lys	Ala	Gly	Phe 345	Ala	Ala	Leu	Gln	Leu 350	Glu	Туг
Phe	Phe	Thr 355	Ala	Gly	Pro	Asp	Glu 360	Val	Arg	Ala	Trp	Thr 365	Ile	Arg	Lys
Gly	Thr 370	Lys	Ala	Pro	Gln	Ala 375	Ala	Gly	Lys	Ile	His 380	Thr	Asp	Phe	Glu
Lys 385	Gly	Phe	Ile	Met	Ala 390	Glu	Val	Met	Lys	Tyr 395	Glu	Asp	Phe	Lys	Glu 400
Glu	Gly	Ser	Glu	Asn 405	Ala	Val	Lys	Ala	Ala 410	Gly	Lys	Tyr	Arg	Gln 415	Gln
Gly	Arg	Asn	Туг 420	Ile	Val	Glu	Asp	Gly 425	Asp	Ile	Ile	Phe	Phe 430	ГÀЗ	Phe
Asn	Thr	Pro		Gln		_	Lys	_							

<210> 1304 <211> 94

<212> PRT

<213> Homo sapiens

<400> 1304

Glu Lys Lys Arg Gly Arg Glu Asp Lys Pro Gly Thr Met Ala Thr Phe 1 5 10 15

Pro Pro Ala Thr Ser Ala Pro Gln Gln Pro Pro Gly Pro Glu Asp Glu 20 25 30

Asp Ser Ser Leu Asp Glu Ser Asp Leu Tyr Ser Leu Ala His Ser Tyr 35 40 45

Leu Gly Gly Gly Arg Lys Gly Arg Thr Lys Arg Glu Ala Ala Ala 50 55 60

Asn Thr Asn Arg Pro Ser Pro Gly Gly His Glu Arg Lys Leu Val Thr 65 70 75 80

Lys Leu Gln Asn Ser Glu Arg Lys Lys Arg Gly Ala Arg Arg 85 90

<210> 1305

<211> 82

<212> PRT

<213> Homo sapiens

<400> 1305

Val Ile Leu Glu Met Val Ile Val Phe Cys Leu Val Thr Phe Ala Thr 1 5 10 15

Val Pro Phe Lys Thr Met Trp Lys Pro Gln Val Cys Gly Gln His Arg
20 25 30

Trp Asn Asp Ile Leu Cys Phe Leu Arg Leu Pro Ser Thr Arg His Ile 35 40 45

Ser Leu Val Leu Gln Met Ser Ala Gln Val Leu Val Thr Ser Phe Ser 50 55 60

Cys Cys Pro Gly Lys Ser Val Cys Ala Gly Ala Gly Ala Leu Ala Leu 65 70 75 80

Phe Arg

<210> 1306

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<212	2> PI	RT'													
<213	3> но	omo s	sapie	ens											
<400)> 1:	306													
Ala 1	Arg	Glu	Met	Ala 5	Ala	Gln	Gln	Arg	Asp 10	Суз	Gly	Gly	Ala	Ala 15	Glr
Leu	Ala	Gly	Pro 20	Ala	Ala	Glu	Ala	Asp 25	Pro	Leu	Gly	Arg	Phe 30	Thr	Суя
Pro	Val	Cys 35	Leu	Glu	Val	Tyr	Glu 40	Lys	Pro	Val	Gln	Val 45	Pro	Суз	Gly
His	Val 50	Phe	Суз	Ser	Ala	Сув 55	Leu	Gln	Glu	Cys	Leu 60	Lys	Pro	Lys	Lys
Pro 65	Val	Cys	Gly	Val	Cys 70	Arg	Ser	Ala	Leu	Ala 75	Pro	Gly	Val	Arg	Ala 80
Val	Glu	Leu	Glu	Arg 85	Gln	Ile	Glu	Ser	Thr 90	Glu	Thr	Ser	Cys	His 95	Gly
Суз	Arg	Lys	Asn 100	Phe	Phe	Leu	Ser	Lys 105	Ile	Arg	Ser	His	Val 110	Ala	Thr
Cys	Ser	Lys 115	Tyr	Gln	Asn	Tyr	Ile 120	Met	Glu	Gly	Val	Lys 125	Ala	Thr	Ile
Lys	Asp 130	Ala	Ser	Leu	Gln	Pro 135	Arg	Asn	Val	Pro	Asn 140	Arg	Tyr	Thr	Phe
Pro 145	Суз	Pro	Tyr	Cys	Pro 150	Glu	Lys	Asn	Phe	Asp 155	Gln	Glu	Gly	Leu	Va1
Glu	His	Cys	Lys	Leu 165	Phe	His	Ser	Thr	Asp 170	Thr	Lys	Ser	Val	Val 175	Cys
Pro	Ile	Cys	Ala 180	Ser	Met	Pro	Trp	Gly 185	Asp	Pro	Asn	Tyr	Arg 190	Ser	Ala
Asn	Phe	Arg 195	Glu	His	Ile	Gln	Arg 200	Arg	His	Arg	Phe	Ser 205	Tyr	Asp	Thr
Phe	Val 210	Asp	Tyr	Asp	Val	Asp 215	Glu	Glu	Asp	Met	Met 220	Asn	Gln	Val	Leu
Gln 225	Arg	Ser	Ile		Asp	Gln									

	0> 1 1> 1														
	2> P														
_			sapi	on c											
	J- 11	Omo .	aapr.	c113											
	0> 1														
Gln 1	Lys	Gln	Arg	Thr 5	Phe	Trp	Lys	Tyr	Tyr 10	Tyr	Asp	Gly	Lys	Asp 15	Ty
Ile	Glu	Phe	Asn 20	Lys	Glu	Ile	Pro	Ala 25	Trp	Val	Pro	Phe	Asp 30	Pro	Ala
Ala	Gln	Ile 35	Thr	Lys	Gln	Lys	Trp 40	Glu	Ala	Glu	Pro	Val 45	Tyr	Val	Glı
Arg	Ala 50	Lys	Ala	Tyr	Leu	Glu 55	Glu	Glu	Суѕ	Pro	Ala 60	Thr	Leu	Arg	Lys
Tyr 65	Leu	Lys	Tyr	Ser	Lys 70	Asn	Ile	Leu	Asp	Arg 75	Gln	Asp	Pro	Pro	Ser 80
Val	Val	Val	Thr	ser 85	His	Gln	Ala	Pro	Gly 90	Glu	Lys	Lys	Lys	Leu 95	Lys
Суз	Leu	Ala	Tyr 100	Asp	Phe	туг	Pro	Gly 105	Lys	Ile	Asp	Val	Ніs 110	Trp	Thr
Arg	Ala	Gly 115	Glu	Val	Gln	Glu	Pro 120	Glu	Leu	Arg	Gly	Asp 125	Val	Leu	His
Asn	Gly 130	Asn	Gly	Thr	Tyr	Gln 135	Ser	Trp	Val	Val	Val 140	Ala	Val	Pro	Pro
Gln 145	Asp	Thr	Ala	Pro	Туг 150	Ser	Cys	His	Val	Gln 155	His	Ser	Ser	Leu	Ala 160
Gln	Pro	Leu	Val	Val 165	Pro	Trp	Glu	Ala	Ser 170						

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<213> Homo sapiens

<220>

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Pro Val Ser Pro Gln Glu Arg Pro Pro Pro Tyr Leu Ala Val Pro Gly

His Gly Glu Glu Tyr Pro Val Ala Gly Ala His Ser Ser Pro Pro Lys 25

Ala Arg Phe Leu Arg Val Pro Ser Glu His Pro Tyr Leu Thr Pro Ser

Pro Glu Ser Pro Glu His Trp Ala Ser Pro Ser Pro Pro Ser Leu Ser 55

Asp Trp Ser Glu Ser Thr Pro Ser Pro Ala Thr Ala Thr Gly Ala Met

WO 00/55350

1348

65 70 75 Ala Thr Thr Gly Ala Leu Pro Ala Gln Pro Leu Pro Leu Ser Val 85 90 Pro Ser Ser Leu Ala Gln Ala Gln Thr Gln Leu Gly Pro Gln Pro Glu 100 105 Val Thr Pro Lys Arg Gln Val Leu Ala 115 <210> 1310 <211> 206 <212> PRT <213> Homo sapiens <400> 1310 Gln Cys Pro Gly Arg Ala Gly Ala Pro Gln Thr Arg Ala Pro Arg Ala Arg Glu Arg Gly Gly Ala Met Ala Thr Ala Asn Gly Ala Val Glu Asn Gly Gln Pro Asp Arg Lys Pro Pro Ala Leu Pro Arg Pro Ile Arg Asn Leu Glu Val Lys Phe Thr Lys Ile Phe Ile Asn Asn Glu Trp His Glu 50 55 Ser Lys Ser Gly Lys Lys Phe Ala Thr Cys Asn Pro Ser Thr Arg Glu Gln Ile Cys Glu Val Glu Glu Gly Asp Lys Pro Asp Val Asp Lys Ala 90 Val Glu Ala Ala Gln Val Ala Phe Gln Arg Gly Ser Pro Trp Arg Arg 100 Leu Asp Ala Leu Ser Arg Gly Arg Leu Leu His Gln Leu Ala Asp Leu Val Glu Arg Asp Arg Ala Thr Leu Ala Ala Leu Glu Thr Met Asp Thr 130 135 Gly Lys Pro Phe Leu His Ala Phe Phe Ile Asp Leu Glu Gly Cys Ile Arg Thr Leu Arg Tyr Phe Ala Gly Trp Ala Asp Lys Ile Gln Gly Lys 165 170

Thr Ile Pro Thr Asp Asp Asn Val Cys Ala Ser Pro Gly Met Ser Pro 180 185 190

Leu Val Ser Val Gly Pro Ser Leu His Gly Thr Ser Pro Cys 195 200 205

<210> 1311

<211> 142

<212> PRT

<213> Homo sapiens

<400> 1311

Ser Trp Glu Thr Glu Lys Met Gln Thr Ala Gly Ala Leu Phe Ile Ser 1 5 10 15

Pro Ala Leu Ile Arg Cys Cys Thr Arg Gly Leu Ile Arg Pro Val Ser 20 25 30

Ala Ser Phe Leu Asn Ser Pro Val Asn Ser Ser Lys Gln Pro Ser Tyr 35 40 45

Ser Asn Phe Pro Leu Gln Val Ala Arg Arg Glu Phe Gln Thr Ser Val 50 60

Val Ser Arg Asp Ile Asp Thr Ala Ala Lys Phe Ile Gly Ala Gly Ala 65 70 75 80

Ala Thr Val Gly Val Ala Gly Ser Gly Ala Gly Ile Gly Thr Val Phe 85 90 95

Gly Ser Leu Ile Ile Gly Tyr Ala Arg Asn Pro Ser Leu Lys Gln Gln
100 105 110

Leu Phe Ser Tyr Ala Ile Leu Gly Phe Ala Leu Ser Glu Ala Met Gly 115 120 125

Leu Phe Cys Leu Met Val Ala Phe Leu Ile Leu Phe Ala Met 130 135 140

<210> 1312

<211> 495

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

WO 00/55350 PCT/US00/05882

1350

<222> (121) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (392) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (460) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1312 Arg Arg Met Glu Gly Gln Asp Glu Val Ser Ala Arg Glu Gln His Phe His Ser Gln Val Arg Glu Ser Thr Ile Cys Phe Leu Leu Phe Ala Ile Leu Tyr Val Val Ser Tyr Phe Ile Ile Thr Arg Tyr Lys Arg Lys Ser Asp Glu Gln Glu Asp Glu Asp Ala Ile Val Asn Arg Ile Ser Leu Phe 55 60 Leu Ser Thr Phe Thr Leu Ala Val Ser Ala Gly Ala Val Leu Leu Leu Pro Phe Ser Ile Ile Ser Asn Glu Ile Leu Leu Ser Phe Pro Gln Asn Tyr Tyr Ile Gln Trp Leu Asn Gly Ser Leu Ile His Gly Leu Trp Asn Leu Ala Ser Leu Phe Ser Asn Leu Xaa Leu Phe Val Leu Met Pro Phe 120 Ala Phe Phe Leu Glu Ser Glu Gly Phe Ala Gly Leu Lys Lys Gly 135 Ile Arg Ala Arg Ile Leu Glu Thr Leu Val Met Leu Leu Leu Leu Ala 145 Leu Leu Ile Leu Gly Ile Val Trp Val Ala Ser Ala Leu Ile Asp Asn 165 170 Asp Ala Ala Ser Met Glu Ser Leu Tyr Asp Leu Trp Glu Phe Tyr Leu 185

Pro Tyr Leu Tyr Ser Cys Ile Ser Leu Met Gly Cys Leu Leu Leu

		195					200					205			
Leu	Cys 210		Pro	Val	Gly	Leu 215		Arg	Met	Phe	Thr 220		Met	Gly	Gln
Leu 225		Val	Lys	Pro	230		Leu	Glu	Asp	Leu 235	Asp	Glu	Gln	Ile	Tyr 240
Ile	Ile	Thr	Leu	Glu 245		Glu	Ala	Leu	Gln 250		Arg	Leu	Asn	Gly 255	Leu
Ser	Ser	Ser	Val 260	Glu	Туг	Asn	Ile	Met 265	Glu	Leu	Glu	Gln	Glu 270	Leu	Glu
Asn	Val	Lys 275	Thr	Leu	Lys	Thr	Lys 280		Asp	Pro	Trp	Ser 285	Ser	Phe	Ser
Val	Leu 290		Ser	Pro	Val	Trp 295	His	Phe	Ala	Ala	Gln 300	Thr	Pro	Ala	Asp
Ile 305	Val	Ser	Pro	Asp	Ser 310	His	Phe	Met	Leu	Ser 315	Thr	Gln	Gly	Met	Ser 320
Trp	Ala	Gln	Leu	Val 325	Phe	Leu	Leu	Pro	Ala 330	Ser	Arg	Pro	Gly	Asn 335	Ser
Gln	Asp	Lys	Arg 340	Arg	Lys	Lys	Ala	Ser 345	Ala	Trp	Glu	Arg	Asn 350	Leu	Val
Tyr	Pro	Ala 355	Val	Met	Val	Leu	Leu 360	Leu	Ile	Glu	Thr	Ser 365	Ile	Ser	Val
Leu	Leu 370	Val	Ala	Cys	Asn	11e 375	Leu	Суз	Leu	Leu	Val 380	Asp	Glu	Thr	Ala
Met 385	Pro	Lys	Gly	Thr	Arg 390	Gly	Xaa	Gly	Ile	Gly 395	Asn	Ala	Ser	Leu	Ser 400
Thr	Phe	Gly	Phe	Val 405	Gly	Ala	Ala	Leu	Glu 410	Ile	Ile	Leu	Ile	Phe 415	Tyr
Leu	Met	Val	Ser 420	Ser	Val	Val	Gly	Phe 425	Tyr	Ser	Leu	Arg	Phe 430	Phe	Gly
		435					440			Met		445			•
	450					455				Ala	460				
۱rg	Thr	Leu	Gly	Leu	His	Lys	Leu	His	Leu	Pro	Asn	Thr	Ser	Ara	Asp

465 470 475 480 Ser Glu Thr Ala Lys Pro Ser Val Asn Gly His Gln Lys Ala Leu 485 <210> 1313 <211> 790 <212> PRT <213> Homo sapiens <400> 1313 Gly Thr Arg Gly Thr Ala Thr Glu Arg Leu Lys Met Ile Pro Phe Leu Pro Met Phe Ser Leu Leu Leu Leu Ile Val Asn Pro Ile Asn Ala Asn Asn His Tyr Asp Lys Ile Leu Ala His Ser Arg Ile Arg Gly Arg 40 Asp Gln Gly Pro Asn Val Cys Ala Leu Gln Gln Ile Leu Gly Thr Lys 55 Lys Lys Tyr Phe Ser Thr Cys Lys Asn Trp Tyr Lys Lys Ser Ile Cys Gly Gln Lys Thr Thr Val Leu Tyr Glu Cys Cys Pro Gly Tyr Met Arg Met Glu Gly Met Lys Gly Cys Pro Ala Val Leu Pro Ile Asp His Val 105 Tyr Gly Thr Leu Gly Ile Val Gly Ala Thr Thr Thr Gln Arg Tyr Ser 120 Asp Ala Ser Lys Leu Arg Glu Glu Ile Glu Gly Lys Gly Ser Phe Thr Tyr Phe Ala Pro Ser Asn Glu Ala Trp Asp Asn Leu Asp Ser Asp Ile 155 Arg Arg Gly Leu Glu Ser Asn Val Asn Val Glu Leu Leu Asn Ala Leu 165 His Ser His Met Ile Asn Lys Arg Met Leu Thr Lys Asp Leu Lys Asn Gly Met Ile Ile Pro Ser Met Tyr Asn Asn Leu Gly Leu Phe Ile Asn 200 205

	210	110	7.511	017	vul	215		Val	ASII	суз	220	-	116	116	n I.
Gly 225	Asn	Gln	Ile	Ala	Thr 230	Asn	Gly	Val	Val	His 235		Ile	Asp	Arg	Va:
Leu	Thr	Gln	Ile	Gly 245	Thr	Ser	Ile	Gln	Asp 250		Ile	Glu	Ala	Glu 255	Ası
Asp	Leu	Ser	Ser 260	Phe	Arg	Ala	Ala	Ala 265		Thr	Ser	Asp	11e 270	Leu	Glı
Ala	Leu	Gly 275	Arg	Asp	Gly	His	Phe 280	Thr	Leu	Phe	Ala	Pro 285	Thr	Asn	Glu
Ala	Phe 290	Glu	Lys	Leu	Pro	Arg 295	Gly	Val	Leu	Glu	Arg 300	Ile	Met	Gly	Asp
Lys 305	Val	Ala	Ser	Glu	Ala 310	Leu	Met	Lys	Tyr	His 315	Ile	Leu	Asn	Thr	120 320
Gln	Cys	Ser	Glu	Ser 325	Ile	Met	Gly	Gly	Ala 330	Val	Phe	Glu	Thr	Leu 335	Glu
Gly	Asn	Thr	Ile 340	Glu	Ile	Gly	Суз	Asp 345	Gly	Asp	Ser	Ile	Thr 350	Val	Asr
Gly	Ile	Lys 355	Met	Val	Asn	Lys	Lys 360	Asp	Ile	Val	Thr	Asn 365	Asn	Gly	Val
	370					375					380		Lys		
385					390					395			Leu		400
				405					410				Tyr	415	
			420					425					Ser 430		
		435					440					445	Lys		
	450					455					460		Thr		
31y 465	Lys	Gln	Leu	Arg	Val 470	Phe	Val	Tyr	Arg	Thr 475	Ala	Val	Cys	Ile	Glu 480

no.	11 Se	c Cy:	s ne	489		. G17	y ser	гуs	490	_	/ Arg	, Asr	ı GIŞ	495	
Hi	s Ile	≘ Phe	3 Arg		ı Ile	: Ile	. Lys	Pro 505		a Glu	Lys	Ser	510		Gl
Ly	s Lei	1 Lys 515		a Asp	Lys	Arç	9 Phe 520		Thr	Phe	e Leu	525		Leu	Gl
Ala	a Ala 530		Leu	Lys	Glu	535	Leu	Thr	Gln	Pro	Gly 540		Trp	Thr	Le
Pho 54!		. Pro	Thr	Asn	Asp 550		Phe	Lys	Gly	Met 555		Ser	Glu	Glu	Ly 56
Gli	ı Ile	e Leu	ılle	565		Lys	Asn	Ala	570		Asn	Ile	Ile	Leu 575	_
His	s Leu	Thr	580		Val	Phe	Ile	Gly 585		Gly	Phe	Glu	Pro 590	Gly	Va.
Thi	Asn	11e 595		Lys	Thr	Thr	Gln 600	Gly	Ser	Lys	Ile	Phe 605	Leu	Lys	Gl
Va]	Asn 610		Thr	Leu	Leu	Val 615	Asn	Glu	Leu	Lys	Ser 620	Lys	Glu	Ser	Ası
11e		Thr	Thr	Asn	Gly 630	Val	Ile	His	Val	Val 635	Asp	Lys	Leu	Leu	Ту: 640
				645			Asn		650					655	
Lys	Leu	Ile	Lys 660	Tyr	Ile	Gln	Ile	Lys 665	Phe	Val	Arg	Gly	Ser 670	Thr	Phe
Lys	Glu	Ile 675	Pro	Val.	Thr	Val	Tyr 680	Lys	Pro	Ile	Ile	Lys 685	Lys	Tyr	Thr
Lys	Ile 690	Ile	Asp	Gly	Val	Pro 695	Val	Glu	Ile	Thr	Glu 700	Lys	Glu	Thr	Arg
Glu 705		Arg	Ile	Ile	Thr 710	Gly	Pro	Glu	Ile	Lys 715	Tyr	Thr	Arg	Ile	Ser 720
Thr	Gly	Gly	Gly	Glu 725	Thr	Glu	Glu	Thr	Leu 730	Lys	Lys	Leu	Leu	Gln 735	Glu
Glu	Val	Thr	Lys 740	Val	Thr	Lys	Phe	Ile 745	Glu	Gly	Gly	Asp	Gly 750	His	Leu

Phe Glu Asp Glu Glu Ile Lys Arg Leu Leu Gln Gly Asp Thr Pro Val 755 760 765

Arg Lys Leu Gln Ala Asn Lys Lys Val Gln Gly Ser Arg Arg Leu 770 775 780

Arg Glu Gly Arg Ser Gln 785 790

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<211> 73

<212> PRT

<213> Homo sapiens

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<223> Xaa equals any of the naturally occurring L-amino acids

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<221> SITE

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<400> 1314

Thr Ser Trp Ala Phe Asp Glu Thr Gly Xaa Asn Thr Ala Val Phe Leu 1 5 10 15

Leu Glu Ile Xaa Trp Gly Ile Phe Phe Glu Leu Met Gly Thr Ile Arg 20 25 30

His Asn Cys Leu His Lys Leu Gly Ile Xaa Asp Phe Gly Ile Thr Ile $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Tyr Gln Asn Gly Asp Ile Ser Pro Leu Val Leu Arg Cys Lys Pro Lys 50 60

Asn Ile Met Thr Ser Phe Gln Ala Ser 65 70

<210> 1315

	1> 2 2> P														
			sapi	ens											
	0> 1														
Pro 1	Gly	Arg	Pro	Thr 5	Arg	Pro	Arg	Thr	Arg 10	Gly	Ile	Asn	Lys	Leu 15	Ile
Arg	Ile	Gly	Arg 20	Asn	Glu	Cys	Val	Val 25	Val	Ile	Arg	Val	Asp 30	Lys	Glu
Lys	Gly	Tyr 35	Ile	Asp	Leu	Ser	Lys 40	Arg	Arg	Val	Ser	Pro 45	Glu	Glu	Ala
Ile	Lys 50	Cys	Glu	Asp	Lys	Phe 55	Thr	Lys	Ser	Lys	Thr 60	Val	Tyr	Ser	Ile
Leu 65	Arg	His	Val	Ala	Glu 70	Val	Leu	Glu	Tyr	Thr 75	Lys	Asp	Glu	Gln	Leu 80
Glu	Ser	Leu	Phe	G1n .85	Arg	Thr	Ala	Trp	Val 90	Phe	Asp	Asp	Lys	Tyr 95	Lys
Arg	Pro	Gly	туr 100	Gly	Ala	Tyr	Asp	Ala 105	Phe	Lys	His	Ala	Val 110	Ser	Asp
Pro	Ser	Ile 115	Leu	Asp	Ser	Leu	Asp 120	Leu	Asn	Glu	Asp	Glu 125	Arg	Glu	Val
Leu	11e 130	Asn	Asn	Ile	Asn	Arg 135	Arg	Leu	Thr	Pro	Gln 140	Ala	Val	Lys	Ile
Arg 145	Ala	Asp	Ile	Glu	Val 150	Ala	Cys	Tyr	Gly	Туг 155	Glu	Gly	Ile	Asp	Ala 160
Val	Lys	Glu	Ala	Leu 165	Arg	Ala	Gly	Leu	Asn 170	Cys	Ser	Thr	Glu	Asn 175	Met
Pro	Ile	Lys	Ile 180	Asn	Leu	Ile	Ala	Pro 185	Pro	Arg	Tyr	Val	Met 190	Thr	Thr
Thr	Thr	Leu 195	Glu	Arg	Thr	Glu	Gly 200	Leu	Ser	Val	Leu	Ser 205	Gln	Ala	Met
Ala	Val 210	Ile	Lys	Glu	Lys	11e 215	Glu	Glu	Lys	Arg	Gly 220	Val	Phe	Asn	Val
Gln 225	Met	Glu	Pro	Lys	Val 230	Val	Thr	Asp	Thr	Asp 235	Glu	Thr	Glu	Leu	Ala 240

Arg Gln Met Glu Arg Leu Glu Arg Glu Asn Ala Glu Val Asp Gly Asp

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1357

245 250 255

Asp Asp Ala Glu Glu Met Glu Ala Lys Ala Glu Asp 260 265

<210> 1316

<211> 315

<212> PRT

<213> Homo sapiens

<400> 1316

Gly Gln Arg Ala Gly Met Pro His Ala Gln Gly Gly Trp Ser Gly Pro 1 5 10 15

Ala Ala Asp Ser Ala Glu Pro Ala Leu Pro Ala Gly Glu Pro Gly Gly 20 25 30

Pro Thr Leu Met Arg Leu Asn Ser Val Gln Ser Ser Glu Arg Pro Leu 35 40 45

Phe Leu Val His Pro Ile Glu Gly Ser Thr Thr Val Phe His Ser Leu 50 55 60

Ala Ser Arg Leu Ser Ile Pro Thr Tyr Gly Leu Gln Cys Thr Arg Ala 65 70 75 80

Ala Pro Leu Asp Ser Ile His Ser Leu Ala Ala Tyr Tyr Ile Asp Cys
85 90 95

Ile Arg Gln Val Gln Pro Glu Gly Pro Tyr Arg Val Ala Gly Tyr Ser 100 105 110

Tyr Gly Ala Cys Val Ala Phe Glu Met Cys Ser Gln Leu Gln Ala Gln 115 120 125

Gln Ser Pro Ala Pro Thr His Asn Ser Leu Phe Leu Phe Asp Gly Ser 130 135 140

Pro Thr Tyr Val Leu Ala Tyr Thr Gln Ser Tyr Arg Ala Lys Leu Thr 145 150 155 160

Pro Gly Cys Glu Ala Glu Ala Glu Thr Glu Ala Ile Cys Phe Phe Val 165 170 175

Gln Gln Phe Thr Asp Met Glu His Asn Arg Val Leu Glu Ala Leu Leu 180 185 190

Pro Leu Lys Gly Leu Glu Glu Arg Val Ala Ala Val Asp Leu Ile 195 200 205

Ile Lys Ser His Gln Gly Leu Asp Arg Gln Glu Leu Ser Phe Ala Ala

215 Arg Ser Phe Tyr Tyr Lys Leu Arg Ala Ala Glu Gln Tyr Thr Pro Lys 225 230 235 Ala Lys Tyr His Gly Asn Val Met Leu Leu Arg Ala Lys Thr Gly Gly 245 250 Ala Tyr Gly Glu Asp Leu Gly Ala Asp Tyr Asn Leu Ser Gln Val Cys 265 Asp Gly Lys Val Ser Val His Val Ile Glu Gly Asp His Arg Thr Leu 280 Leu Glu Gly Ser Gly Leu Glu Ser Ile Ile Ser Ile Ile His Ser Ser 295 300 Leu Ala Glu Pro Arg Val Ser Val Arg Glu Gly 310 <210> 1317 <211> 191 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (5) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (10) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (20) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE

<222> (25) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (186) <223> Xaa equals any of the naturally occurring L-amino acids Thr Thr Xaa Val Xaa Asp Arg Leu Leu Xaa Thr Ser Gly Ser Pro Gly 10 Thr Asp Arg Xaa Phe Gly His Glu Xaa Glu Met Ala Pro Asn Ala Ser Cys Leu Cys Val His Val Arg Ser Glu Glu Trp Asp Leu Met Thr Phe Asp Ala Asn Pro Tyr Asp Ser Val Lys Lys Ile Lys Glu His Val Arg Ser Lys Thr Lys Val Pro Val Gln Asp Gln Val Leu Leu Gly Ser 75 70 Lys Ile Leu Lys Pro Arg Arg Ser Leu Ser Ser Tyr Gly Ile Asp Lys 85 90 Glu Lys Thr Ile His Leu Thr Leu Lys Val Val Lys Pro Ser Asp Glu 105 Glu Leu Pro Leu Phe Leu Val Glu Ser Gly Asp Glu Ala Lys Arg His Leu Leu Gln Val Arg Arg Ser Ser Ser Val Ala Gln Val Lys Ala Met 135 Ile Glu Thr Lys Thr Gly Ile Ile Pro Glu Thr Gln Ile Val Thr Cys 150 155 Asn Gly Lys Arg Leu Glu Asp Gly Lys Met Met Ala Asp Tyr Gly Ile 165 Arg Lys Gly Asn Leu Leu Phe Leu Ala Xaa Tyr Cys Ile Gly Gly

185

<210> 1318

<211> 230

<212> PRT

<213> Homo sapiens

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Arg 1	Asn	Leu	Gln	Glu 5	Thr	Ala	Ile	Met	Ala 10		Lys	Pro	Lys	Leu 15	His
Tyr	Phe	Asn	Ala 20	Arg	Gly	Arg	Met	Glu 25		Thr	Arg	Trp	Leu 30	Leu	Ala
Ala	Ala	Gly 35	Val	Glu	Phe	Glu	Glu 40	Lys	Phe	Ile	Lys	Ser 45	Ala	Glu	Asg
Leu	Asp 50	Lys	Leu	Arg	Asn	Asp 55	Gly	Tyr	Leu	Met	Phe 60	Gln	Gln	Val	Pro
Met 65	Val	Glu	Ile	Asp	Gly 70	Met	Lys	Leu	Val	Gln 75	Thr	Arg	Ala	Ile	Leu 80
Asn	Tyr	Ile	Ala	Ser 85	Lys	туг	Asn	Leu	Tyr 90	Gly	Lys	Asp	Ile	Lys 95	Glu
Arg	Ala	Leu	Ile 100	Asp	Met	Tyr	Ile	Glu 105	Gly	Ile	Ala	Asp	Leu 110	Gly	Glu
Met	Ile	Leu 115	Leu	Leu	Pro	Val	Cys 120	Pro	Pro	Glu	Glu	Lys 125	Asp	Ala	Lys
Leu	Ala 130	Leu	Ile	Lys	Glu	Lys 135	Ile	Lys	Asn	Arg	Tyr 140	Phe	Pro	Ala	Phe
Glu 145	Lys	Val	Leu	Lys	Ser 150	His	Gly	Gln	Asp	Туг 155	Leu	Val	Gly	Asn	Lys 160
Leu	Ser	Arg	Ala	Asp 165	Ile	His	Leu	Val	Glu 170	Leu	Leu	Tyr	Tyr	Val 175	Glu
Glu	Leu	Asp	Ser 180	Ser	Leu	Ile	Ser	Ser 185	Phe	Pro	Leu	Leu	Lys 190	Ala	Leu
Lys	Thr	Arg 195	Ile	Ser	Asn	Leu	Pro 200	Thr	Val	Lys	Lys	Phe 205	Leu	Gln	Pro
Gly	Ser 210	Pro	Arg	Lys	Pro	Pro 215	Met	Asp	Glu	Lys	Ser 220	Leu	Glu	Glu	Ala
Arg	Lys	Ile	Phe	Arg	Phe										

<210> 1319. <211> 279

<212> PRT															
<213> Homo sapiens															
<400> 1319															
Glu 1	Gly	Pro	Ala	Glu 5	Gly	Asn	Met	Ala	Ala 10	Lys	Val	Phe	Glu	Ser 15	Ile
Gly	Lys	Phe	Gly 20	Leu	Ala	Leu	Ala	Val 25	Ala	Gly	Gly	Val	Val 30	Asn	Ser
Ala	Leu	Tyr 35	Asn	Val	Asp	Ala	Gly 40	His	Arg	Ala	Val	Ile 45	Phe	Asp	Arg
Phe	Arg 50	Gly	Val	Gln	Asp	Ile 55	Val	Val	Gly	Glu	Gly 60	Thr	His	Phe	Leu
Ile 65	Pro	Trp	Val	Gln	Lys 70	Pro	Ile	Ile	Phe	Asp 75	Cys	Arg	Ser	Arg	Pro 80
Arg	Asn	Val	Pro	Val 85	Ile	Thr	Gly	Ser	Lys 90	Asp	Leu	Gln	Asn	Val 95	Asn
Ile	Thr	Leu	Arg 100	Ile	Leu	Phe	Arg	Pro 105	Val	Ala	Ser	Gln	Leu 110	Pro	Arç
Ile	Phe	Thr 115	Ser	Ile	Gly	Glu	Asp 120	туг	Asp	Glu	Arg	Val 125	Leu	Pro	Ser
Ile	Thr 130	Thr	Glu	Ile	Leu	Lys 135	Ser	Val	Val	Ala	Arg 140	Phe	Asp	Ala	Gly
Glu 145	Leu	Ile	Thr	Gln	Arg 150	Glu	Leu	Val	Ser	Arg 155	Gln	Val	Ser	Asp	Asp 160
Leu	Thr	Glu	Arg	Ala 165	Ala	Thr	Phe	Gly	Leu 170	Ile	Leu	Asp	Asp	Val 175	ser
Leu	Thr	His	Leu 180	Thr	Phe	Gly	Lys	Glu 185	Phe	Thr	Glu	Ala	Val 190	Glu	Ala
Lys	Gln	Val 195	Ala	Gln	Gln	Glu	Ala 200	Glu	Arg	Ala	Arg	Phe 205	Val	Val	Glu
Lys	Ala 210	Glu	Gln	Gln	Lys	Lys 215	Ala	Ala	Ile	Ile	Ser 220	Ala	Glu	Gly	Asp
Ser 225	Lys	Ala	Ala	Glu	Leu 230	Ile	Ala	Asn	Ser	Leu 235	Ala	Thr	Ala	Gly	Asp 240

Gly Leu Ile Glu Leu Arg Lys Leu Glu Ala Ala Glu Asp Ile Ala Tyr 245 250 255

Gln Leu Ser Arg Ser Arg Asn Ile Thr Tyr Leu Pro Ala Gly Gln Ser 260 265 270

Val Leu Leu Gln Leu Pro Gln 275

<210> 1320

<211> 406

<212> PRT

<213> Homo sapiens

<400> 1320

Val Thr Ala Cys Ala Ala Pro Ala Ala Trp Leu Pro Ile Leu Val Ala 1 5 10 15

Asp Ile Trp Ser Ser Tyr Asn Met Ala Asp Ile Asp Asn Lys Glu Gln 20 25° 30

Ser Glu Leu Asp Gln Asp Leu Asp Asp Val Glu Glu Val Glu Glu Glu 35 40 45

Glu Thr Gly Glu Glu Thr Lys Leu Lys Ala Arg Gln Leu Thr Val Gln 50 60

Met Met Gln Asn Pro Gln Ile Leu Ala Ala Leu Gln Glu Arg Leu Asp 65 70 75 80

Gly Leu Val Glu Thr Pro Thr Gly Tyr Ile Glu Ser Leu Pro Arg Val $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$

Val Lys Arg Arg Val Asn Ala Leu Lys Asn Leu Gln Val Lys Cys Ala 100 105 110

Gln Ile Glu Ala Lys Phe Tyr Glu Glu Val His Asp Leu Glu Arg Lys 115 120 125

Tyr Ala Val Leu Tyr Gln Pro Leu Phe Asp Lys Arg Phe Glu Ile Ile 130 135 140

Asn Ala Ile Tyr Glu Pro Thr Glu Glu Glu Cys Glu Trp Lys Pro Asp 145 150 155 160

Glu Glu Asp Glu Ile Ser Glu Glu Leu Lys Glu Lys Ala Lys Ile Glu
165 170 175

Asp Glu Lys Lys Asp Glu Glu Lys Glu Asp Pro Lys Gly Ile Pro Glu 180 185 190 WO 00/55350 PCT/US00/05882

1363

Phe Trp Leu Thr Val Phe Lys Asn Val Asp Leu Leu Ser Asp Met Val

Gln Glu His Asp Glu Pro Ile Leu Lys His Leu Lys Asp Ile Lys Val 210 215 220

Lys Phe Ser Asp Ala Gly Gln Pro Met Ser Phe Val Leu Glu Phe His 225 230 235 240

Phe Glu Pro Asn Glu Tyr Phe Thr Asn Glu Val Leu Thr Lys Thr Tyr 245 250 255

Arg Met Arg Ser Glu Pro Asp Asp Ser Asp Pro Phe Ser Phe Asp Gly 260 265 270

Pro Glu Ile Met Gly Cys Thr Gly Cys Gln Ile Asp Trp Lys Lys Gly
275 280 285

Lys Asn Val Thr Leu Lys Thr Ile Lys Lys Gln Lys His Lys Gly 290 295 300

Arg Gly Thr Val Arg Thr Val Thr Lys Thr Val Ser Asn Asp Ser Phe 305 310 315 320

Phe Asn Phe Phe Ala Pro Pro Glu Val Pro Glu Ser Gly Asp Leu Asp 325 330 335

Asp Asp Ala Glu Ala Ile Leu Ala Ala Asp Phe Glu Ile Gly His Phe 340 345 350

Leu Arg Glu Arg Ile Ile Pro Arg Ser Val Leu Tyr Phe Thr Gly Glu 355 360 365

Ala Ile Glu Asp Asp Asp Asp Tyr Asp Glu Glu Glu Glu Ala 370 375 380

Asp Glu Gly Tyr Gln Leu Phe Glu Glu Val Lys Ser Cys Ser Lys Leu 385 390 395 400

Phe Gln Arg Trp Leu Gln 405

<210> 1321

<211> 173

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<22	2> (55)													
<22	3> X	aa e	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
<400> 1321															
Gln 1	Ser	Ala	Cys	Ser 5	Leu	Leu	Pro	Glu	Met 10		Arg	Ile	Leu	Thr 15	Arg
Thr	Pro	Ser	Ser 20	Arg	Met	Ile	Val	Leu 25	Arg	Leu	Met	Pro	Val 30	Gly	Gly
Arg	Arg	Pro 35	Ile	Val	Thr	Ser	Phe 40	Gly	Gly	Суз	Ser	Thr	Ala	Pro	Arg
Ala	Asn 50	Phe	Pro	Leu	Pro	Xaa 55	Pro	Ala	Leu	Arg	Gln 60	Ser	Arg	Ser	Lys
Met 65	Ala	Val	Val	Gly	Val 70	Ser	Ser	Val	Ser	Arg 75	Leu	Leu	Gly	Arg	Ser 80
Arg	Pro	Gln	Leu	Gly 85	Arg	Pro	Met	ser	Ser 90	Gly	Ala	His	Gly	Glu 95	Glu
Gly	Ser	Ala	Arg 100	Met	Trp	Lys	Thr	Leu 105	Thr	Phe	Phe	Val	Ala 110	Leu	Pro
Gly	Val	Ala 115	Val	Ser	Met	Leu	Asn 120	Val	туг	Leu	Lys	Ser 125	His	His	Gly
Glu	His 130	Glu	Arg	Pro	Glu	Phe 135	Ile	Ala	туг	Pro	His 140	Leu	Arg	Ile	Arg
Thr 145	Lys	Pro	Phe	Pro	Trp 150	Gly	Asp	Gly	Asn	His 155	Thr	Leu	Phe	His	Asn 160
Pro	His	Val	Asn	Pro 165	Leu	Pro	Thr	Gly	Tyr 170	Glu	Asp	Glu			

<210> 1322 <211> 209 <212> PRT <213> Homo sapiens

<400> 1322

Lys Thr Gln Ala Ala Ser Val Glu Ala Val Lys Met Leu Asp Glu Ile

1 5 10 15

Leu Leu Gln Leu Ser Ala Ser Val Pro Val Asp Val Met Pro Gly Glu 20 25 30

Phe Asp Pro Thr Asn Tyr Thr Leu Pro Gln Gln Pro Leu His Pro Cys
35 40

Met Phe Pro Leu Ala Thr Ala Tyr Ser Thr Leu Gln Leu Val Thr Asn 50 55 60

Pro Tyr Gln Ala Thr Ile Asp Gly Val Arg Phe Leu Gly Thr Ser Gly 65 70 75 80

Gln Asn Val Ser Asp Ile Phe Arg Tyr Ser Ser Met Glu Asp His Leu 85 90 95

Glu Ile Leu Glu Trp Thr Leu Arg Val Arg His Ile Ser Pro Thr Ala 100 105 110

Pro Asp Thr Leu Gly Cys Tyr Pro Phe Tyr Lys Thr Asp Pro Phe Ile 115 120 125

Phe Pro Glu Cys Pro His Val Tyr Phe Cys Gly Asn Thr Pro Ser Phe 130 135 140

Gly Ser Lys Ile Ile Arg Gly Pro Glu Asp Gln Thr Val Leu Leu Val 145 150 155 160

Thr Val Pro Asp Phe Ser Ala Thr Gln Thr Ala Cys Leu Val Asn Leu 165 170 175

Arg Ser Leu Ala Cys Gln Pro Ile Ser Phe Ser Gly Phe Gly Ala Glu 180 185 190

Asp Asp Asp Leu Gly Gly Leu Gly Trp Ala Pro Asp Ser Lys Lys Trp 195 200 205

Phe

<210> 1323

<211> 291

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (30)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (57)

<22	3> }	kaa e	qual	s an	y of	the	nat	ural	ly c	ccur	ring	L-a	mino	aci	.ds
<40	0> 1	323													
Asn 1		val	Ala	Thr 5		His	Glu	Pro	Ala 10		Val	Pro	Ala	Pro	Gln
Gly	Asp	Leu	Leu 20		Gly	Ala	Glu	Pro 25		Gly	Gly	Asn	Xaa 30		Arg
Arg	Pro	Pro 35		Ala	Arg	Glu	Gln 40		Gln	Ser	Pro	Pro 45		Ala	Arg
Gly	Gly 50		Gly	Ser	Leu	Ala 55	Thr	Xaa	Ala	Pro	Pro 60	Ser	Ser	Gly	Leu
Ser 65		Pro	Gly	Cys	Phe 70	Arg	Leu	Arg	Leu	Trp 75	Met	Leu	Arg	Leu	Ser 80
Glu	Arg	Asn	Met	Lys 85	Val	Leu	Leu	Ala	Ala 90	Ala	Leu	Ile	Ala	Gly 95	Ser
Val	Phe	Phe	Leu 100	Leu	Leu	Pro	Gly	Pro 105	Ser	Ala	Ala	Asp	Glu 110	Lys	Lys
Lys	Gly	Pro 115	Lys	Val	Thr	Val	Lys 120	Val	Tyr	Phe	Asp	Leu 125	Arg	Ile	Gly
Asp	Glu 130	Asp	Val	Gly	Arg	Val 135	Ile	Phe	Gly	Leu	Phe 140	Gly	Lys	Thr	Val
Pro 145	Lys	Thr	Val	Asp	Asn 150	Phe	Val	Ala	Leu	Ala 155	Thr	Gly	Glu	Lys	Gly 160
Phe	Gly	Tyr	Lys	Asn 165	Ser	Lys	Phe	His	Arg 170	Val	Ile	Lys	Asp	Phe 175	Met
Ile	Gln	Gly	Gly 180	Asp	Phe	Thr	Arg	Gly 185	Asp	Gly	Thr	Gly	Gly 190	Lys	Ser
Ile	Tyr	Gly 195	Glu	Arg	Phe	Pro	Asp 200	Glu	Asn	Phe	Lys	Leu 205	Lys	His	Tyr
Gly	Pro 210	Gly	Trp	Val	Ser	Met 215	Ala	Asn	Ala	Gly	Lys 220	Asp	Thr	Asn	Gly
Ser 225	Gln	Phe	Phe	Ile	Thr 230	Thr	Val	Lys	Thr	Ala 235	Trp	Leu	Asp	Gly	Lys 240
His	Val	Val	Phe	Gly 245	Lys	Val	Leu	Glu	Gly 250	Met	Glu	Val	Val	Arg 255	Lys

Val Glu Ser Thr Lys Thr Asp Ser Arg Asp Lys Pro Leu Lys Asp Val 260 265 270

Ile Ile Ala Asp Cys Gly Lys Ile Glu Val Glu Lys Pro Phe Ala Ile 275 280 285

Ala Lys Glu 290

<210> 1324

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1324

Glu Cys Leu Val Arg Ser Lys Asn Ile Thr Gln Ile Val Gly His Ser 1 5 10 15

Gly Cys Glu Ala Lys Ser Ile Gln Asn Arg Ala Cys Leu Gly Gln Cys 20 25 30

Phe Ser Tyr Ser Val Pro Asn Thr Phe Pro Gln Ser Thr Glu Ser Leu 35 40 45

Val His Cys Asp Ser Cys Met Pro Ala Gln Ser Met Trp Glu Ile Val 50 60

Thr Leu Glu Cys Pro Gly His Glu Glu Val Pro Arg Val Asp Lys Leu 65 70 75 80

Val Glu Lys Ile Leu His Cys Ser Cys Gln Ala Cys Gly Lys Glu Pro 85 90 95

Ser His Glu Gly Leu Ser Val Tyr Val Gln Gly Glu Asp Gly Pro Gly
100 105 110

Ser Gln Pro Gly Thr His Pro His Pro His Pro His Pro Gly
115 120 125

Gly Gln Thr Pro Glu Pro Glu Asp Pro Pro Gly Ala Pro His Thr Glu 130 135 140

Glu Glu Gly Ala Glu Asp 145 150

<210> 1325 <211> 56

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<212> PRT
<213> Homo sapiens
<400> 1325
Glu Ile Asn Ile Ser Arg Lys Gly Glu Ser Arg Phe Tyr Lys Met Ser
Gln Leu Ser Asn Ile Trp Gly Ser Asp Ser Phe Phe Val Arg Thr Phe
Glu Thr Ser Lys Gln Pro Leu Phe Leu Lys Asn Ser Gly Phe Thr Leu
                             40
Thr His Val Ser Phe Thr Pro Phe
     50
                        55
<210> 1326
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<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (438)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (447)
<223> Xaa equals any of the naturally occurring L-amino acids
Arg Leu Pro Leu Gly Ser Arg Ser Pro Ser Glu Ala Ala Gly Ala Glu
                  5
Thr Ala Pro Ser Ser Leu Ser Ala Ala Met Thr Pro Leu Val Ser Arg
                                 25
Leu Xaa Arg Leu Trp Ala Ile Met Arg Lys Pro Arg Ala Ala Val Gly
                             40
Ser Gly His Arg Lys Gln Ala Ala Ser Gln Glu Gly Arg Gln Lys His
```

Ala 65	Lys	Asn	Asn	Ser	Gln 70	Ala	Lys	Pro	Ser	Ala 75	Cys	Asp	Gly	Leu	Ala 80
Arg	Gln	Pro	Glu	Glu 85	Val	Val	Leu	Gln	Ala 90	Ser	Val	Ser	Ser	Tyr 95	His
Leu	Phe	Arg	Asp 100	Val	Ala	Glu	Val	Thr 105	Ala	Phe	Arg	Gly	Ser 110	Leu	Leu
Ser	Trp	Туг 115	Asp	Gln	Glu	Lys	Arg 120	Asp	Leu	Pro	Trp	Arg 125	Arg	Arg	Ala
Glu	Asp 130	G1u	Met	Asp	Leu	Asp 135	Arg	Arg	Ala	Tyr	Ala 140	Val	Trp	Val	Ser
Glu 145	Val	Met	Leu	Gln	Gln 150	Thr	Gln	Val	Ala	Thr 155	Val	Ile	Asn	Tyr	Туг 160
	Ī	_		165	-	-			170		_		Ala	175	
			180					185		-		-	Tyr 190	_	
		195					200			-		205	Glu		
	210					215					220		Leu		
225					230					235			Ala		240
				245		_			250				Leu	255	
			260	_		_		265					Ser 270		
		275					280					285	Pro		
	290					295					300		Thr		
305					310					315		_	Arg		320
GIN	Arg	val	GLu	Gln 325	Glu	Gin	Leu	Leu	330	ser	Gly	ser	Leu	Ser 335	Gly

Ser Pro Asp Val Glu Glu Cys Ala Pro Asn Thr Gly Gln Cys His Leu 340 345 350

Cys Leu Pro Pro Ser Glu Pro Trp Asp Gln Thr Leu Gly Val Val Asn 355 360 365

Phe Pro Arg Lys Ala Ser Arg Lys Pro Pro Arg Glu Glu Ser Ser Ala 370 375 380

Thr Cys Val Leu Glu Gln Pro Gly Ala Leu Gly Ala Gln Ile Leu Leu 385 390 395 400

Val Gln Arg Pro Asn Ser Gly Leu Leu Ala Gly Leu Trp Glu Phe Pro 405 410 415

Ser Val Thr Trp Glu Pro Ser Glu Gln Leu Gln Arg Lys Ala Leu Leu 420 425 430

Gln Glu Leu Gln Arg Xaa Ala Gly Pro Leu Pro Ala Thr His Xaa Arg 435 440 445

His Leu Gly Glu Val Val His Thr Phe Ser His Ile Lys Leu Thr Tyr 450 455 460

Gln Val Tyr Gly Leu Ala Leu Glu Gly Gln Thr Pro Val Thr Thr Val 465 470 475 480

Pro Pro Gly Ala Arg Cys

<210> 1327

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1327

Lys Thr Leu Phe Thr Tyr Ser Phe His Gly Tyr Asn Thr Leu Ala Asp 1 5 10 15

Phe Leu Leu Ala Leu Gly Ala Met Ile Leu Ile Thr Phe Cys Lys Val 20 25 30

Thr Asn Val Ile His Ser Thr Leu Cys Gly Ser His Leu Phe Arg Leu 35 40 45

Met Cys Phe Gly Glu Arg Lys Lys Phe Leu Ala Glu Tyr Tyr Phe Glu 50 55 60

Leu Ser Arg Thr Leu Ser His Gln Arg Gln Phe Phe Ser Val Gln Phe

1371

65 70 75 80

Pro Ile Pro Asp Asn Leu Leu Lys 85

<210> 1328

<211> 424

<212> PRT

<213> Homo sapiens

<400> 1328

Ile Arg Val Ser Phe Met Asn Asn Gln Lys Gln Gln Lys Pro Thr Leu $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Ser Gly Gln Arg Phe Lys Thr Arg Lys Arg Asp Glu Lys Glu Arg Phe 20 25 30

Asp Pro Thr Gln Phe Gln Asp Cys Ile Ile Gln Gly Leu Thr Glu Thr 35 40 45

Gly Thr Asp Leu Glu Ala Val Ala Lys Phe Leu Asp Ala Ser Gly Ala 50 60 \cdot

Lys Leu Asp Tyr Arg Arg Tyr Ala Glu Thr Leu Phe Asp Ile Leu Val 65 70 75 80

Ala Gly Gly Met Leu Ala Pro Gly Gly Thr Leu Ala Asp Asp Met Met 85 90 95

Arg Thr Asp Val Cys Val Phe Ala Ala Gln Glu Asp Leu Glu Thr Met 100 105 110

Gln Ala Phe Ala Gln Val Phe Asn Lys Leu Ile Arg Arg Tyr Lys Tyr 115 120 125

Leu Glu Lys Gly Phe Glu Asp Glu Val Lys Lys Leu Leu Leu Phe Leu 130 135 140

Lys Gly Phe Ser Glu Ser Glu Arg Asn Lys Leu Ala Met Leu Thr Gly 145 150 150

Val Leu Leu Ala Asn Gly Thr Leu Asn Ala Ser Ile Leu Asn Ser Leu 165 170 175

Tyr Asn Glu Asn Leu Val Lys Glu Gly Val Ser Ala Ala Phe Ala Val 180 185 190

Lys Leu Phe Lys Ser Trp Ile Asn Glu Lys Asp Ile Asn Ala Val Ala 195 200 205

А	14	210	ren	Arg	гАа	vaı	215	met	ASP	ASN	Arg	220	Met	GIU	Leu	Pne
	ro 25	Ala	Asn	Lys	Gln	Ser 230	Val	Glu	His	Phe	Thr 235	Lys	Tyr	Phe	Thr	Glu 240
A	la	Gly	Leu	Lys	Glu 245	Leu	Ser	Glu	Tyr	Val 250	Arg	Asn	Gln	Gln	Thr 255	Île
G	ly	Ala	Arg	Lys 260	Glu	Leu	Gln	Lys	Glu 265	Leu	Gln	Glu	Gln	Met 270	Ser	Arç
G	ly	Asp	Pro 275	Phe	Lys	Asp	Ile	Ile 280	Leu	туг	Val	Lys	Glu 285	Glu	Met	Lys
L	ys	Asn 290	Asn	Ile	Pro	Glu	Pro 295	Val	Val	Ile	Gly	Ile 300	Val	Trp	Ser	Ser
	al 05	Met	Ser	Thr	Val	Glu 310	Trp	Asn	Lys	Lys	Glu 315	Glu	Leu	Val	Ala	Glu 320
G	ln	Ala	Ile	Lys	His 325	Leu	Lys	Gln	Tyr	Ser 330	Pro	Leu	Leu	Ala	Ala 335	Phe
T	hr	Thr	Gln	Gly 340	Gln	Ser	Glu	Leu-	Thr 345	Leu	Leu	Leu	Lys	Ile 350	Gln	Glu
T	yr	Суз	Туг 355	Asp	Asn	Ile	His	Phe 360	Met	Lys	Ala	Phe	Gln 365	Lys	Ile	Val
V	al	Leu 370	Phe	Tyr	Lys	Ala	Glu 375	Val	Leu	Ser	Glu	Glu 380	Pro	Ile	Leu	Lys
	rp 85	Tyr	Lys	Asp	Ala	His 390	Val	Ala	Lys	Gly	Lys 395	Ser	Val	Phe	Leu	Glu 400
G	ln	Met	Lys	Lys	Phe 405	Val	Glu	Trp	Leu	Lys 410	Asn	Ala	Glu	Glu	Glu 415	Ser

<210> 1329

<211> 558

<212> PRT

<213> Homo sapiens

Glu Ser Glu Ala Glu Glu Gly Asp 420

<400> 1329

Trp 1		Cys	Ser	Val 5		Leu	Ala	Ser	Thr 10		Gly	Glu	Gln	Ala 15	
Ala	Val	Ala	Ala 20		Phe	Ser	Leu	His 25		Asp	Tyr	Ala	Met 30	Leu	Gly
Phe	Val	Gly 35		Val	Ala	Ala	Ala 40		Ala	Ser	Gly	Ala 45	Leu	Arg	Arg
Leu	Thr 50		Ser	Ala	Ser	Leu 55	Pro	Pro	Ala	Gln	Leu 60	Leu	Leu	Arg	Ala
Ala 65	Pro	Thr	Ala	Val	His 70	Pro	Val	Arg	Asp	Tyr 75	Ala	Ala	Gln	Thr	Ser 80
Pro	Ser	Pro	Lys	Ala 85	Gly	Ala	Ala	Thr	Gly 90	Arg	Ile	Val	Ala	Val 95	Ile
Gly	Ala	Val	Val 100		Val	Gln	Phe	Asp 105	Glu	Gly	Leu	Pro	Pro 110	Ile	Leu
Asn	Ala	Leu 115	Glu	Val	Gln	Gly	Arg 120	Glu	Thr	Arg	Leu	Val 125	Leu	Glu	Val
Ala	Gln 130	His	Leu	Gly	Glu	Ser 135	Thr	Val	Arg	Thr	Ile 140	Ala	Met	Asp	Gly
Thr 145	Glu	Gly	Leu	Val	Arg 150	Gly	Gln	Lys	Val	Leu 155	Asp	Ser	Gly	Ala	Pro 160
Ile	Lys	Ile	Pro	Val 165	Gly	Pro	Glu	Thr	Leu 170	Gly	Arg	Ile	Met	Asn 175	Val
Ile	Gly	Glu	Pro 180	Ile	Asp	Glu	Arg	Gly 185	Pro	Ile	Lys	Thr	Lys 190	Gln	Phe
Ala	Pro	Ile 195	His	Ala	Glu	Ala	Pro 200	Glu	Phe	Met	Glu	Met 205	Ser	Val	Glu
Gln	Glu 210	Ile	Leu	Val	Thr	Gly 215	Ile	Lys	Val	Val	Asp 220	Leu	Leu	Ala	Pro
Tyr 225	Ala	Lys	Gly	Gly	Lys 230	Ile	Gly	Leu	Phe	Gly 235	Gly	Ala	Gly	Val	Gly 240
Lys	Thr	Val	Leu	Ile 245	Met	Glu	Leu	Ile	Asn 250	Asn	Val	Ala	Lys	Ala 255	His
Gly	Gly [.]	туr	Ser	Val	Phe	Ala	Gly	Val	Gly	Glu	Arg	Thr	Arg	Glu	Gly

ASN	Asp	275	туг	nıs	GIU	met	280	GIU	ser	GIÀ	val	285	ASN	Leu	гÃа
Asp	Ala 290	Thr	Ser	Lys	Val	Ala 295	Leu	Val	Tyr	Gly	Gln 300	Met	Asn	Glu	Pro
Pro 305	Gly	Ala	Arg	Ala	Arg 310	Val	Ala	Leu	Thr	Gly 315	Leu	Thr	Val	Ala	Glu 320
Tyr	Phe	Arg	Asp	G1n 325	Glu	Gly	Gln	Asp	Val 330	Leu	Leu	Phe	Ile	Asp 335	Asn
Ile	Phe	Arg	Phe 340	Thr	Gln	Ala	Gly	Ser 345	Glu	Val	Ser	Ala	Leu 350	Leu	Gly
Arg	Ile	Pro 355	Ser	Ala	Val	Gly	туr 360	Gln	Pro	Thr	Leu	Ala 365	Thr	Asp	Met
	370					Ile 375					380		-		
385					390	Val				395					400
				405		His		-	410					415	
			420		_	Ile		425			_		430		
		435				Pro	440					445			
	450		_			Lys 455				•	460	_			
465					470	Gly		_		475				-	480
				485		Arg			490					495	
			500			Phe		505					510		
		515				Gly	520					525			
Asp	His 530	Leu	Pro	Glu	Gln	Ala 535	Phe	Tyr	Met	Val	Gly 540	Pro	Ile	Glu	Glu

1375

Ala Val Ala Lys Ala Asp Lys Leu Ala Glu Glu His Ser Ser 545 550 555

<210> 1330

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1330

Thr Thr Pro Leu Ser Gln Ile Val Ala Arg Gly Leu Ile Ala Arg Gly
1 5 10 15

Val Pro Gly Ala Ile Val Asn Val Ser Ser Gln Cys Ser Gln Arg Ala 20 25 30

Val Thr Asn His Ser Val Tyr Cys Ser Thr Lys Gly Ala Leu Asp Met $35 \hspace{1cm} 40 \hspace{1cm} 45$

Leu Thr Lys Val Met Ala Leu Glu Leu Gly Pro His Lys Ile Arg Val 50 60

Asn Ala Val Asn Pro Thr Val Val Met Thr Ser Met Gly Gln Ala Thr 65 70 . 75 80

Trp Ser Asp Pro His Lys Ala Lys Thr Met Leu Asn Arg Ile Pro Leu
85 90 95

Gly Lys Phe Ala Glu Val Glu His Val Val Asn Ala Ile Leu Phe Leu 100 105 110

Leu Ser Asp Arg Ser Gly Met Thr Thr Gly Ser Thr Leu Pro Val Glu 115 120 125

Gly Gly Phe Trp Ala Cys 130

<210> 1331

<211> 188

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (135)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE <222> (137) <223> Xaa equals any of the naturally occurring L-amino acids Ile Arg His Glu Pro Ser Arg Cys Arg Ser Arg Thr Ala Ala Val Cys 10 Ser Pro Pro Pro Cys Pro Pro Trp Arg Arg Pro Arg Gly Pro Trp Thr 25 Ala Lys Ser Pro Pro Trp Pro Pro Ala Arg Pro Arg Trp Gln Trp Thr Arg Ala Leu Asn Ser Thr Ala Ala Pro Pro Arg Ser Pro Pro Ala Pro Cys Pro Cys Arg Pro Asn Ser Ala Arg Arg Lys Arg Arg Pro Pro Ala 70 65 75 Asn Cys Arg Ala Ser Ser Gly Trp Leu Ala Ala Trp Lys Pro Ser Arg Thr Gly Pro Ala Ala Arg Pro Arg Arg Pro Val Pro Asp Thr Ser Phe 105 His Ser Ser Pro Val Gln Ala Ala Val His Phe Val Gly Tyr Lys Ile 115 Asn His Gly Pro Ala Met Xaa Leu Xaa Phe Leu Leu Gln Leu Arg Leu Gly Arg Gly Pro Gly Leu Pro Arg Glu Asn Val Leu Glu Thr Ala Pro 145 150 155 Val Phe Leu Ala Trp Phe Ile Cys Pro Gly Ser Gly Ser Asp Ser Gly 165

Gly Ser Glu Thr Ser Val Ala Leu Ser Tyr Trp Gly

185

<210> 1332

<211> 237

<212> PRT

<213> Homo sapiens

180

<220>

<221> SITE

<222> (5)

- <223> Xaa equals any of the naturally occurring L-amino acids
- <400> 1332
- Asp Asp Arg Arg Xaa Asp Ala Glu Ala Asp Lys Met Ala Ala Ala Ala 1 5 10 15
- Val Gln Gly Gly Arg Ser Gly Gly Ser Gly Gly Cys Ser Gly Ala Gly 20 25 30
- Gly Ala Ser Asn Cys Gly Thr Gly Ser Gly Arg Ser Gly Leu Leu Asp 35 40 45
- Lys Trp Lys Ile Asp Asp Lys Pro Val Lys Ile Asp Lys Trp Asp Gly 50 60
- Ser Ala Val Lys Asn Ser Leu Asp Asp Ser Ala Lys Lys Val Leu Leu 65 70 75 80
- Glu Lys Tyr Lys Tyr Val Glu Asn Phe Gly Leu Ile Asp Gly Arg Leu 85 90 95
- Thr Ile Cys Thr Ile Ser Cys Phe Phe Ala Ile Val Ala Leu Ile Trp 100 105 110
- Asp Tyr Met His Pro Phe Pro Glu Ser Lys Pro Val Leu Ala Leu Cys 115 120 125
- Val Ile Ser Tyr Phe Val Met Met Gly Ile Leu Thr Ile Tyr Thr Ser 130 135 140
- Tyr Lys Glu Lys Ser Ile Phe Leu Val Ala His Arg Lys Asp Pro Thr 145 150 155 160
- Gly Met Asp Pro Asp Asp Ile Trp Gln Leu Ser Ser Ser Leu Lys Arg 165 170 175
- Phe Asp Asp Lys Tyr Thr Leu Lys Leu Thr Phe Ile Ser Gly Arg Thr 180 185 190
- Lys Gln Gln Arg Glu Ala Glu Phe Thr Lys Ser Ile Ala Lys Phe Phe 195 200 205
- Asp His Ser Gly Thr Leu Val Met Asp Ala Tyr Glu Pro Glu Ile Ser 210 220

25

<211> 56 <212> PRT <213> Homo sapiens <400> 1333 Thr Thr Ala Asn Pro Leu Lys Thr Arg Gly Leu Ala Leu Val Ala Gln Pro Lys Val Ala Leu Gln Ile Phe Glu Arg Ala Thr Ala Thr Phe Leu Pro Ser Gln Leu Ser Leu Asp Phe Ser Glu Ser Gly Tyr Cys Tyr Pro Asn Val Cys Leu Tyr Glu Cys Ile 50

<210> 1334 <211> 207 <212> PRT <213> Homo sapiens

<400> 1334

Ser His Pro Ala Cys Ala Lys Val Glu Tyr Ala Tyr Ser Asp Asn Ser

Leu Asp Pro Asp Asp Glu Asp Ser Asp Tyr His Gln Glu Ala Tyr Lys 20

Glu Ser Tyr Lys Asp Arg Arg Arg Ala His Thr Gln Ala Glu Gln 40

Lys Arg Arg Asp Ala Ile Lys Arg Gly Tyr Asp Asp Leu Gln Thr Ile

Val Pro Thr Cys Gln Gln Gln Asp Phe Ser Ile Gly Ser Gln Lys Leu

Ser Lys Ala Ile Val Leu Gln Lys Thr Ile Asp Tyr Ile Gln Phe Leu

His Lys Glu Lys Lys Gln Glu Glu Glu Val Ser Thr Leu Arg Lys 100

Asp Val Thr Ala Leu Lys Ile Met Lys Val Asn Tyr Glu Gln Ile Val 120

Lys Ala His Gln Asp Asn Pro His Glu Gly Glu Asp Gln Val Ser Asp 135

Gln Val Lys 145	Phe Asr	150	he Gln	Gly	Ile	Met 155	Asp	Ser	Leu	Phe	Gln 160
Ser Phe Asn	Ala Ser 165		er Val	Ala	Ser 170	Phe	Gln	Glu	Leu	Ser 175	Ala
Cys Val Phe	Ser Trp	o Ile G	lu Glu	His 185	Cys	Lys	Pro	Gln	Thr 190	Leu	Arg
Glu Ile Val 195		Val L	eu His 200		Leu	Lys	Asn	Gln 205	Leu	Tyr	
<210> 1335 <211> 1005 <212> PRT <213> Homo	sapiens										
<400> 1335	Cla mu		-1 D	91	••- 1			•	_		_
Arg Val Leu 1	GIN TYP		al Pro	GIU	10	Lys	Asp	Leu	Tyr	Asn 15	Trp
Leu Glu Val	Glu Phe 20	Asn Pi	ro Leu	Lys 25	Leu	Cys	Glu	Arg	Val 30	Thr	Lys
Val Leu Asn 35	Trp Val	Arg G	lu Gln 40	Pro	Glu	Lys	Glu	Pro 45	Glu	Leu	Gln
Gln Tyr Val 50	Pro Gln		ln Asn 55	Asn	Thr	Ile	Leu 60	Arg	Leu	Leu	Gln
Gln Val Ser 65	Gln Ile	Tyr Gl 70	ln Ser	Ile	Glu	Phe 75	Ser	Arg	Leu	Thr	Ser 80
Leu Val Pro	Phe Val	Asp Al	la Phe	Gln	Leu 90	Glu	Arg	Ala	Ile	Val 95	Asp
Ala Ala Arg	His Cys 100	Asp Le				Ile	Asp	His	Thr 110	Ser	Arg
Thr Leu Ser 115	Phe Gly	Ser As	p Leu 120	Asn	Tyr	Ala	Thr	Arg 125	Glu	Asp	Ala
Pro Ile Gly 130	Pro His	Leu Gl		Met	Pro	Ser	Glu 140	Gln	Ile	Arg	Asn
Gln Leu Thr 145	Ala Met	Ser Se	r Val	Leu		Lys 155	Ala	Leu	Glu	Val	Ile 160

гур	PIO	, WIG	. nis	165		GIN	GIU	гÀг	170		ı GIn	H1S	Gln	175	
Val	Thr	Ala	Туг 180		Lys	Asn	Ser	Arg 185		Glu	His	Gln	Arg 190		: Le
Ala	Arg	Arg 195		Thr	Ile	Glu	Glu 200	Arg	Lys	Glu	Arg	Leu 205		Ser	Le
	210					215					220				
225	•				230		Glu			235					240
				245			Leu		250					255	
			260				Glu	265					270		
		275					Asp 280					285			
	290					295	Gln				300				
305					310		Lys			315					320
				325			Glu		330					335	
			340				Asp	345					350		
		355					Gln 360					365			
	370					375	Met				380				
385					390		Gln			395					400
				405			Glu		410					415	
ırg	гÀз	Arg	Gln 420	Arg	Lys	Glu	Glu	Arg 425	Arg	Ile	Thr	Tyr	Tyr 430	Arg	Glu

Lys	Glu	Glu 435	Glu	Glu	Gln	Arg	Arg 440	Ala	Glu	Glu	Gln	Met 445	Leu	Lys	Glu
Arg	Glu 450	Glu	Arg	Glu	Arg	Ala 455	Glu	Arg	Ala	Lys	Arg 460	Glu	Glu	Glu	Leu
Arg 465	Glu	Tyr	Gln	Glu	Arg 470	Val	Lys	Lys	Leu	Glu 475	Glu	Val	Glu	Arg	Lys 480
Lys	Arg	Gln	Arg	Glu 485	Leu	Glu	Ile	Glu	Glu 490	Arg	Glu	Arg	Arg	Arg 495	Glu
Glu	Glu	Arg	Arg 500	Leu	Gly	Asp	Ser	Ser 505	Leu	Ser	Arg	Lys	Asp 510	Ser	Arg
Trp	Gly	Asp 515	Arg	Asp	Ser	Glu	Gly 520	Thr	Trp	Arg	Lys	Gly 525	Pro	Glu	Ala
Asp	Ser 530	Glu	Trp	Arg	Arg	Gly 535	Pro	Pro	Glu	Lys	Glu 540	Trp	Arg	Arg	Gly
Glu 545	Gly	Arg	Asp	Glu	Asp 550	Arg	Ser	His	Arg	Arg 555	Asp	Glu	Glu	Arg	Pro 560
Arg	Arg	Leu	Gly	Asp 565	Asp	Glu	Asp	Arg	Glu 570	Pro	Ser	Leu	Arg	Pro 575	Asp
Asp	Asp	Arg	Val 580	Pro	Arg	Arg	Gly	Met 585	Asp	Asp	Asp	Arg	Gly 590	Pro	Arg
Arg	Gly	Pro 595	Glu	Glu	Asp	Arg	Phe 600	Ser	Arg	Arg	Gly	Ala 605	Asp	Asp	Asp
Arg	Pro 610	Ser	Trp	Arg	Asn	Thr 615	Asp	Asp	Asp	Arg	Pro 620	Pro	Arg	Arg	Ile
Ala 625	Asp	Glu	Asp	Arg	Gly 630	Asn	Trp	Arg	His	Ala 635	Asp	Asp	Asp	Arg	Pro 640
Pro	Arg	Arg	Gly	Leu 645	Asp	Glu	Asp	Arg	Gly 650	Ser	Trp	Arg	Thr	Ala 655	Asp
Glu	Asp	Arg	Gly 660	Pro	Arg	Arg	Gly	Met 665	Asp	Asp	Asp	Arg	Gly 670	Pro	Arg
Arg	Gly	Gly 675	Ala	Asp	Asp	Glu	Arg 680	Ser	Ser	Trp	Arg	Asn 685	Ala	Asp	Asp
Asp	Arg 690	Gly	Pro	Arg	Arg	Gly 695	Leu	Asp	Asp	Asp	Arg 700	Gly	Pro	Arg	Arg

Gly 705	Met	Asp	Asp	Asp	Arg 710	Gly	Pro	Arg	Arg	Gly 715	Met	Asp	Asp	Asp	Arg 720
Gly	Pro	Arg	Arg	Gly 725	Met	Asp	Asp	Asp	Arg 730	Gly	Pro	Arg	Arg	Gly 735	Leu
Asp	Asp	Asp	Arg 740	Gly	Pro	Trp	Arg	Asn 745	Ala	Asp	Asp	Asp	Arg 750	Ile	Pro
Arg	Arg	Gly 755	Ala	Glu	Asp	Asp	Arg 760	Gly	Pro	Trp	Arg	Asn 765	Met	Asp	Asp
Asp	Arg 770	Leu	Ser	Arg	Arg	Ala 775	Asp	Asp	Asp	Arg	Phe 780	Pro	Arg	Arg	Gly
Asp 785	Asp	Ser	Arg	Pro	Gly 790	Pro	Trp	Arg	Pro	Leu 795	Val	Lys	Pro	Gly	Gly 800
Trp	Arg	Glu	Lys	Glu 805	Lys	Ala	Arg	Glu	Glu 810	Ser	Trp	Gly	Pro	Pro 815	Arg
Glu	Ser	Arg	Pro 820	Ser	Glu	Glu	Arg	Glu 825	Trp	Asp	Arg	Glu	830 L ys	Glu	Arg
Asp	Arg	Asp 835	Asn	Gln	Asp	Arg	Glu 840	Glu	Asn	Asp	Lys	Asp 845	Pro	Glu	Arg
Glu	Arg 850	Asp	Arg	Glu	Arg	Asp 855	Val	Asp	Arg	Glu	Asp 860	Arg	Phe	Arg	Arg
Pro 865	Arg	Asp	Glu	Gly	Gly 870	Trp	Arg	Arg	Gly	Pro 875	Ala	Glu	Glu	Ser	Ser 880
Ser	Trp	Arg	Asp	Ser 885	Ser	Arg	Arg	Asp	Asp 890	Arg	Asp	Arg	Asp	Asp 895	Arg
Arg	Arg	Glu	Arg 900	Asp	Asp	Arg	Arg	Asp 905	Leu	Arg	Glu	Arg	Arg 910	Asp	Leu
Arg	Asp	Asp 915	Arg	Asp	Arg	Arg	Gly 920	Pro	Pro	Leu	Arg	Ser 925	Glu	Arg	Glu
Glu	Val 930	Ser	Ser	Trp	Arg	Arg 935	Ala	Asp	Asp	Arg	Lys 940	Asp	Asp	Arg	Val
Glu 945	Glu	Arg	Asp	Pro	Pro 950	Arg	Arg	Val	Pro	Pro 955	Pro	Ala	Leu	Ser	Arg 960
Asp	Arg	Glu	Arg	Asp 965	Arg	Asp	Arg	Glu	Arg 970	Glu	Gly	Glu	Lys	Glu 975	Lys

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Ala Ser Trp Arg Ala Glu Lys Asp Arg Glu Ser Leu Arg Arg Thr Lys
            980
                                 985
Asn Glu Thr Asp Glu Asp Gly Trp Thr Thr Val Arg Arg
                            1000
<210> 1336
<211> 231
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<213> Homo sapiens
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<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids
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<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (118)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1336
Ala Gly Ile His Pro Met Asn Ser Ile Ser Ser Leu Asp Arg Thr Arg
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Met	Met	Thr	Pro	Phe	Met	Gly	Ile	Ser	Pro	Leu	Pro	Gly	Gly	Glu	Arg
			20					25					30		

- Phe Pro Tyr Pro Ser Phe His Trp Asp Pro Ile Arg Asp Pro Leu Arg 35 40 45
- Asp Pro Tyr Xaa Glu Leu Asp Ile His Arg Arg Asp Pro Leu Gly Xaa 50 60
- Asp Phe Leu Leu Arg Asn Asp Pro Xaa His Arg Leu Ser Thr Xaa Arg 65 70 75 80
- Leu Xaa Xaa Ala Asp Arg Ser Phe Arg Asp Arg Glu Pro His Asp Tyr

 85 90 95
- Ser His His His His His His His Pro Leu Ser Val Asp Pro Arg 100 105 110
- Arg Glu His Glu Arg Xaa Gly His Leu Asp Glu Arg Glu Arg Leu His
 115 120 125
- Met Leu Arg Glu Asp Tyr Glu His Thr Arg Leu His Ser Val His Pro 130 135 140
- Ala Ser Leu Asp Gly His Leu Pro His Pro Ser Leu Ile Thr Pro Gly 145 150 155 160
- Leu Pro Ser Met His Tyr Pro Arg Ile Ser Pro Thr Ala Gly Asn Gln 165 170 175
- Asn Gly Leu Leu Asn Lys Thr Pro Pro Thr Ala Ala Leu Ser Ala Pro 180 185 190
- Pro Pro Leu Ile Ser Thr Leu Gly Gly Arg Pro Val Ser Pro Arg Arg 195 200 205
- Thr Thr Pro Leu Ser Ala Glu Ile Arg Glu Arg Pro Pro Ser His Thr 210 215 220

Leu Lys Asp Ile Glu Ala Arg 225 230

<210> 1337

<211> 155

<212> PRT

<213> Homo sapiens

<400> 1337

1385

Gly Val Glu Gly Leu Lys Asp Ala Gln Met Arg Asp Leu Leu Ser Pro 1 5 10 15

Pro Thr Asp Asn Arg Pro Gly Gln Met Asp Asn Arg Ser Lys Leu Arg 20 25 30

Asn Ile Val Glu Leu Arg Leu Ala Gly Leu Asp Ile Thr Asp Ala Ser 35 40 45

Leu Arg Leu Ile Ile Arg His Met Pro Leu Leu Ser Lys Leu His Leu 50 55 60

Ser Tyr Cys Asn His Val Thr Asp Gln Ser Ile Asn Leu Leu Thr Ala 65 70 75 80

Val Gly Thr Thr Arg Asp Ser Leu Thr Glu Ile Asn Leu Ser Asp 85 90 95

Cys Asn Lys Val Thr Asp Gln Cys Leu Ser Phe Phe Lys Arg Cys Gly
100 105 110

Asn Ile Cys His Ile Asp Leu Arg Tyr Cys Lys Gln Val Thr Lys Glu 115 120 125

Gly Cys Glu Gln Phe Ile Ala Glu Met Ser Val Ser Val Gln Phe Gly 130 135 140

Gln Val Glu Glu Lys Leu Leu Gln Lys Leu Ser 145 150 155

<210> 1338

<211> 328

<212> PRT

<213> Homo sapiens

<400> 1338

Asn Asn Ser Gly Val Met Pro Glu Met Pro Glu Asp Met Glu Gln Glu

1 5 10 15

Glu Val Asn Ile Pro Asn Arg Arg Val Leu Val Thr Gly Ala Thr Gly 20 25 30

Leu Leu Gly Arg Ala Val His Lys Glu Phe Gln Gln Asn Asn Trp His 35 40 45

Ala Val Gly Cys Gly Phe Arg Arg Ala Arg Pro Lys Phe Glu Gln Val 50 60

Asn Leu Leu Asp Ser Asn Ala Val His His Ile Ile His Asp Phe Gln

65					70					75					80
Pro	His	Val	Ile	Val 85	His	Cys	Ala	Ala	Glu 90		Arg	Pro	Asp	Val 95	
Glu	Asn	Gln	Pro 100		Ala	Ala	Ser	Gln 105		Asn	Val	Asp	Ala 110		Gly
Asn	Leu	Ala 115	Lys	Glu	Ala	Ala	Ala 120		Gly	Ala	Phe	Leu 125		Tyr	Ile
Ser	Ser 130		Tyr	Val	Phe	Asp 135	Gly	Thr	Asn	Pro	Pro 140	Tyr	Arg	Glu	Glu
Asp 145	Ile	Pro	Ala	Pro	Leu 150	Asn	Leu	Tyr	Gly	Lys 155	Thr	Lys	Leu	Asp	Gly 160
Glu	Lys	Ala	Val	Leu 165	Glu	Asn	Asn	Leu	Gly 170	Ala	Ala	Val	Leu	Arg 175	Ile
Pro	Ile	Leu	Tyr 180	Gly	Glu	Val	Glu	Lys 185	Leu	Glu	Glu	Ser	Ala 190	Val	Thr
Val	Met	Phe 195	Asp	Lys	Val	Gln	Phe 200	Ser	Asn	Lys	Ser	Ala 205	Asn	Met	Asp
His	Trp 210	Gln	Gln	Arg	Phe	Pro 215	Thr	His	Val	Lys	Asp 220	Val	Ala	Thr	Val
Cys 225	Arg	Gln	Leu	Ala	Glu 230	Lys	Arg	Met	Leu	Asp 235	Pro	Ser	Ile	Lys	Gly 240
Thr	Phe	His	Trp	Ser 245	Gly	Asn	Glu	Gln	Met 250	Thr	Lys	Tyr	Glu	Met 255	Ala
Cys	Ala	Ile	Ala 260	Asp	Ala	Phe	Asn	Leu 265	Pro	Ser	Ser	His	Leu 270	Arg	Pro
Ile	Thr	Asp 275	Ser	Pro	Val		Gly 280		Gln	Arg	Pro	Arg 285	Asn	Ala	Gln
	Asp 290	Суз	Ser	Lys	Leu	Glu 295	Thr	Leu	Gly	Ile	Gly 300	Gln	Arg	Thr	Pro
Phe 305	Arg	Ile	Gly	Ile	Lys 310	Glu	Ser	Leu	Trp	Pro 315	Phe	Leu	Ile	Asp	Lys 320
Arg	Trp	Arg		Thr 325	Val	Phe	His								

<210> 1339

<211> 64

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1339

Leu Xaa His Pro Phe Ala Val Thr Ser Tyr Gly Lys Asn Leu Tyr Phe 1 5 10 15

Thr Asp Trp Lys Met Asn Ser Val Val Ala Leu Asp Leu Ala Ile Ser 20 25 30

Lys Glu Thr Asp Ala Phe Gln Pro His Lys Gln Thr Arg Leu Tyr Gly 35 40 45

Ile Thr Thr Ala Leu Ser Gln Cys Pro Gln Ala Ile Thr Thr Ala Gln 50 55 60

<210> 1340

<211> 155

<212> PRT

<213> Homo sapiens

<400> 1340

Arg Lys Met Ala Val Glu Ser Arg Val Thr Gln Glu Glu Ile Lys Lys
1 5 10 15

Glu Pro Glu Lys Pro Ile Asp Arg Glu Lys Thr Cys Pro Leu Leu Leu 20 25 30

Arg Val Phe Thr Thr Asn Asn Gly Arg His His Arg Met Asp Glu Phe 35 40 45

Ser Arg Gly Asn Val Pro Ser Ser Glu Leu Gln Ile Tyr Thr Trp Met 50 60

Asp Ala Thr Leu Lys Glu Leu Thr Ser Leu Val Lys Glu Val Tyr Pro 65 70 75 80

Glu Ala Arg Lys Lys Gly Thr His Phe Asn Phe Ala Ile Val Phe Thr

Asp Val Lys Arg Pro Gly Tyr Arg Val Lys Glu Ile Gly Ser Thr Met 100 Ser Gly 115 Ser Gly 120 Ser 120 Ser Met Thr Leu Gln Ser Gln Lys 120 Ser Gln Lys 135 Ser Gln Arg 130 Ser Gly Arg Het Arg Pro Tyr

150

<210> 1341 <211> 72 <212> PRT <213> Homo sapiens

<400> 1341

Ala Gln Leu Pro Ser Ser Ser Phe Leu Arg His Arg Gly Val Phe Leu 1 5 10 15

Thr Pro Leu Leu Ala Met Ser Ser His Lys Thr Phe Arg Ile Lys Arg
20 25 30

Phe Leu Ala Lys Lys Gln Lys Gln Asn Arg Pro Ile Pro Gln Trp Ile 35 40

Arg Met Lys Thr Gly Asn Lys Ile Arg Tyr Asn Ser Lys Arg Arg His 50 60

Trp Arg Arg Thr Lys Leu Gly Leu 65 70

<210> 1342 <211> 270 <212> PRT <213> Homo sapiens

Gln Ile Glu Ile Lys Lys Phe Lys Tyr Gly Ile Glu Glu His Gly Lys
20 25 30

Val	Lys	Met 35	Arg	Gly	Gly	Leu	Leu 40	Arg	Thr	Tyr	Ile	Ile 45	Ser	Ile	Leu
Phe	Lys 50	Ser	Ile	Phe	Glu	Val 55	Ala	Phe	Leu	Leu	Ile 60	Gln	Trp	туг	Ile
Tyr 65	Gly	Phe	Ser	Leu	Ser 70	Ala	Val	Tyr	Thr	Cys 75	Lys	Arg	Asp	Pro	Cys 80
Pro	His	Gln	Val	Asp 85	Cys	Phe	Leu	Ser	Arg 90	Pro	Thr	Glu	Lys	Thr 95	Ile
Phe	Ile	Ile	Phe 100	Met	Leu	Val	Val	Ser 105	Leu	Val	Ser	Leu	Ala 110	Leu	Asn
Ile	Ile	Glu 115	Leu	Phe	Tyr	Val	Phe 120	Phe	Lys	Gly	Val	Lys 125	Asp	Arg	Val
Lys	Gly 130	Lys	Ser	Asp	Pro	туг 135	His	Ala	Thr	Ser	Gly 140	Ala	Leu	Ser	Pro
Ala 145	Lys	Asp	Cys	Gly	Ser 150	Gln	Lys	Tyr	Ala	Tyr 155	Phe	Asn	Gly	Cys	Ser 160
Ser	Pro	Thr	Ala	Pro 165	Leu	Ser	Pro	Met	Ser 170	Pro	Pro	Gly	Tyr	Lys 175	Leu
Val	Thr	Gly	Asp 180	Arg	Asn	Asn	Ser	Ser 185	Cys	Arg	Asn	Tyr	Asn 190	Lys	Gln
Ala	Ser	Glu 195	Gln	Asn	Trp	Ala	Asn 200	Tyr	Ser	Ala	Glu	Gln 205	Asn	Arg	Met
Gly	Gln 210	Ala	Gly	Ser	Thr	Ile 215	Ser	Asn	Ser	His	Ala 220	Gln	Pro	Phe	Asp
Phe 225	Pro	Asp	Asp	Asn	Gln 230	Asn	Ser	Lys	Lys	Leu 235	Ala	Ala	Gly	His	Glu 240
Leu	Gln	Pro	Leu	Ala 245	Ile	Val	Asp	Gln	Arg 250	Pro	Ser	Ser	Arg	Ala 255	Ser
Ser	Arg	Ala	Ser 260	Ser	Arg	Pro	Arg	Pro 265	Asp	Asp	Leu	Glu	11e 270		

<210> 1343

<211> 94

<212> PRT

<213> Homo sapiens

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<400> 1343
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Pro Pro Trp Thr Thr Gly Gly Ser Leu Cys Glu Gln Leu Ala Phe Arg
                                 25
Lys Pro Leu Ser Val Phe Lys Gln Lys Val Glu Gly Ala Thr Lys Gln
                             40
Ala Ala Val Arg Ala Ser Xaa Cys Arg Pro Leu Pro Cys Ser Ser Ser
Ser Phe Ala Ser Ala Ser Ser Val Met Phe Cys Leu Glu Phe Tyr Leu
                                        75
Asp Phe Phe Ser Gly Tyr Phe Ser Val Phe Gln Pro Leu Leu
                 85
<210> 1344
<211> 125
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (118)
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<220>
<221> SITE
<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1344
Tyr Ser Thr Arg Ala Leu Trp Lys Pro Asn His Val His Val Cys Val
                  5
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Cys Val Cys Ala Ser Phe Glu Pro Pro Ser Thr Ala Ala Ser Ser His 20 Asp Thr Lys Leu Leu Ile Ser Thr Phe Leu Trp Val Ala Gln Gly Leu 40 Ile Ala Ser His Ser Ile Thr Arg Ile Glu Ala Arg His Gly Gly Ala Cys Leu Val Val Pro Ala Lys Leu Gly Arg Leu Glu Gly Arg Glu Gly Ser Leu Trp Ser Pro Gly Arg Leu Glu Gly Trp Gln Trp Ser His Gly Ser Gly Gly His Trp His Phe Gln Pro Gly Gly Gly Arg Val Glu Thr 100 105 Phe Val Leu Gln Lys Xaa Lys Lys Lys Xaa Xaa Gly Gly 120 <210> 1345 <211> 131 <212> PRT <213> Homo sapiens <400> 1345 Pro Arg Val Arg Arg Leu Arg Glu Asp Asp Arg Arg Gly Phe Leu Ser Phe Arg Ala Asp Ser Ala His Ala Ser Met Val Asn Val Pro Lys Thr Arg Arg Thr Phe Cys Lys Lys Cys Gly Lys His Gln Pro His Lys Val Thr Gln Tyr Lys Lys Gly Lys Asp Ser Leu Tyr Ala Gln Gly Lys Arg 55 Arg Tyr Asp Arg Lys Gln Ser Gly Tyr Gly Gly Gln Thr Lys Pro Ile 65 Phe Arg Lys Lys Ala Lys Thr Thr Lys Lys Ile Val Leu Arg Leu Glu 90

Cys Val Glu Pro Asn Cys Arg Ser Lys Arg Met Leu Ala Ile Lys Arg

Cys Lys His Phe Glu Leu Gly Gly Asp Lys Lys Arg Lys Gly Gln Val

1392

115 120 125

Ile Gln Phe 130

<210> 1346

<211> 75

<212> PRT

<213> Homo sapiens

<400> 1346

Asn Lys Arg Asn Cys Lys Phe Pro Leu Leu Lys Ile Thr Lys Ile Thr 1 5 10 15

Glu Thr Lys Glu Glu Ile Arg Ile Trp Gly Ile Val Leu Asn Asn Leu 20 25 30

Val Val Lys Lys Asn Asn Cys Ala Cys Leu Asp Leu Asn Lys Pro Pro 35 40 45

Ser Lys Cys Glu Gly Ser Ser Asn Phe Ser Lys His Met Lys Val Leu 50 60

Ile His Phe Asp Lys Gly Pro Leu Lys Lys Ser 65 70 75

<210> 1347

<211> 413

<212> PRT

<213> Homo sapiens

<400> 1347

Gly Val Ala Arg Ala Gln Pro Val Pro Ala Val Leu Ser Trp Leu Leu 1 5 10 15

Ala Leu Leu Arg Cys Ala Ala Thr Met Leu Ser Leu Arg Val Pro Leu 20 25 30

Ala Pro Ile Thr Asp Pro Gln Gln Leu Gln Leu Ser Pro Leu Lys Gly 35 40 45

Leu Ser Leu Val Asp Lys Glu Asn Thr Pro Pro Ala Leu Ser Gly Thr 50 55 60

Arg Val Leu Ala Ser Lys Thr Ala Arg Arg Ile Phe Gln Glu Pro Thr 65 70 75 80

Glu	Pro	Lys	Thr	Lys 85	Ala	Ala	Ala	Pro	Gly 90	Val	Glu	Asp	Glu	Pro 95	Leu
Leu	Arg	Glu	Asn 100	Pro	Arg	Arg	Phe	Val 105	Ile	Phe	Pro	Ile	Glu 110	Tyr	His
Asp	Ile	Trp 115	Gln	Met	Tyr	Lys	Lys 120	Ala	Glu	Ala	Ser	Phe 125	Trp	Thr	Ala
Glu	Glu 130	Val	Asp	Leu	Ser	Lys 135	Asp	Ile	Gln	His	Trp 140	Glu	Ser	Leu	Lys
Pro 145	Glu	Glu	Arg	Tyr	Phe 150	Ile	Ser	His	Val	Leu 155	Ala	Phe	Phe	Ala	Ala 160
Ser	Asp	Gly	Ile	Val 165	Asn	Glu	Asn	Leu	Val 170	Glu	Arg	Phe	Ser	Gln 175	Glu
Val	Gln	Ile	Thr 180	Glu	Ala	Arg	Cys	Phe 185	Tyr	Gly	Phe	Gln	Ile 190	Ala	Met
Glu	Asn	Ile 195	His	Ser	Glu	Met	Tyr 200	Ser	Leu	Leu	Ile	Asp 205	Thr	Tyr	Ile
Lys	Asp 210	Pro	Lys	Glu	Arg	Glu 215	Phe	Leu	Phe	Asn	Ala 220	Ile	Glu	Thr	Met
Pro 225	Cys	Val	Lys	Lys	Lys 230	Ala	Asp	Trp	Ala	Leu 235	Arg	Trp	Ile	Gly	Asp 240
Lys	Glu	Ala	Thr	туr 245	Gly	Glu	Arg	Val	Val 250	Ala	Phe	Ala	Ala	Val 255	Glu
Gly	Ile	Phe	Phe 260	Ser	Gly	Ser	Phe	Ala 265	Ser	Ile	Phe	Trp	Leu 270	Lys	Lys
Arg	Gly	Leu 275	Met	Pro	Gly	Leu	Thr 280	Phe	Ser	Asn	Glu	Leu 285	Ile	Ser	Arg
Asp	Glu 290	Gly	Leu	His	Cys	Asp 295	Phe	Ala	Cys	Leu	Met 300	Phe	Lys	His	Leu
Val 305	His	Lys	Pro	Ser	Glu 310	Glu	Arg	Val	Arg	Glu 315	Ile	Ile	Ile	Asn	Ala 320
Val	Arg	Ile	Glu	Gln 325	Glu	Phe	Leu	Thr	Glu 330	Ala	Leu	Pro	Val	Lys 335	Leu
Ile	Gly	Met	Asn 340	Cys	Thr	Leu	Met	Lys 345	Gln	Tyr	Ile	Glu	Phe 350	Val	Ala

Asp Arg Leu Met Leu Glu Leu Gly Phe Ser Lys Val Phe Arg Val Glu 355 360 365

Asn Pro Phe Asp Phe Met Glu Asn Ile Ser Leu Glu Gly Lys Thr Asn 370 380

Phe Phe Glu Lys Arg Val Gly Glu Tyr Gln Arg Met Gly Val Met Ser 385 390 395 400

Ser Pro Thr Glu Asn Ser Phe Thr Leu Asp Ala Asp Phe
405
410

<210> 1348

<211> 243

<212> PRT

<213> Homo sapiens

<400> 1348

Thr Gly Asn Lys Met Gln Asp Pro Asn Ala Asp Thr Glu Trp Asn Asp 1 5 10 15

Ile Leu Arg Lys Lys Gly Ile Leu Pro Pro Lys Glu Ser Leu Lys Glu 20 25 30

Leu Glu Glu Glu Ala Glu Glu Glu Gln Arg Ile Leu Gln Gln Ser Val 35 40 45

Val Lys Thr Tyr Glu Asp Met Thr Leu Glu Glu Leu Glu Asp His Glu 50 55 60

Asp Glu Phe Asn Glu Glu Asp Glu Arg Ala Ile Glu Met Tyr Arg Arg 65 70 75 80

Arg Arg Leu Ala Glu Trp Lys Ala Thr Lys Leu Lys Asn Lys Phe Gly 85 90 95

Glu Val Leu Glu Ile Ser Gly Lys Asp Tyr Val Gln Glu Val Thr Lys 100 105 110

Ala Gly Glu Gly Leu Trp Val Ile Leu His Leu Tyr Lys Gln Gly Ile 115 120 125

Pro Leu Cys Ala Leu Ile Asn Gln His Leu Ser Gly Leu Ala Arg Lys 130 135 140

Phe Pro Asp Val Lys Phe Ile Lys Ala Ile Ser Thr Thr Cys Ile Pro 145 150 155 160

Asn Tyr Pro Asp Arg Asn Leu Pro Thr Ile Phe Val Tyr Leu Glu Gly

1395

165 170 175 Asp Ile Lys Ala Gln Phe Ile Gly Pro Leu Val Phe Gly Gly Met Asn 185 Leu Thr Arg Asp Glu Leu Glu Trp Lys Leu Ser Glu Ser Gly Ala Ile Met Thr Asp Leu Glu Glu Asn Pro Lys Lys Pro Ile Glu Asp Val Leu 215 Leu Ser Ser Val Arg Arg Ser Val Leu Met Lys Arg Asp Ser Asp Ser 225 230 Glu Gly Asp <210> 1349 <211> 326 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (137) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (142) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1349 Arg Met Ala Thr Pro Leu Pro Pro Pro Ser Pro Arg His Leu Arg Leu Leu Arg Leu Leu Ser Gly Leu Val Leu Gly Ala Ala Leu Arg Gly 25 Ala Ala Ala Gly His Pro Asp Val Ala Ala Cys Pro Gly Ser Leu Asp 35 40 Cys Ala Leu Lys Arg Arg Ala Arg Cys Pro Pro Gly Ala His Ala Cys Gly Pro Cys Leu Gln Pro Phe Gln Glu Asp Gln Gln Gly Leu Cys Val

Pro Arg Met Arg Arg Pro Pro Gly Gly Gly Arg Pro Gln Pro Arg Leu

1396

				85					90					95	
Glu	Asp	Glu	Ile 100	Asp	Phe	Leu	Ala	Gln 105	Glu	Leu	Ala	Arg	Lys 110	Glu	Ser
Gly	His	Ser 115	Thr	Pro	Pro	Leu	Pro 120	Lys	Asp	Arg	Gln	Arg 125	Leu	Pro	Glu
Pro	Ala 130	Thr	Leu	Gly	Phe	Ser 135	Ala	Xaa	Gly	Gln	Gly 140	Leu	Xaa	Leu	Gly
Leu 145	Pro	Ser	Thr	Pro	Gly 150	Thr	Pro	Thr	Pro	Thr 155	Pro	His	Thr	Ser	Leu 160
Gly	Ser	Pro	Val	Ser 165	Ser	Asp	Pro	Val	His 170	Met	Ser	Pro	Leu	Glu 175	Pro
Arg	Gly	Gly	Gln 180	Gly	Asp	Gly	Leu	Ala 185	Leu	Val	Leu	Ile	Leu 190	Ala	Phe
Cys	Val	Ala 195	Gly	Ala	Ala	Ala	Leu 200	Ser	Val	Ala	Ser	Leu 205	Сув	Trp	Cys
Arg	Leu 210	Gln	Arg	Glu	Ile	Arg 215	Leu	Thr	Gln	ГÀЗ	Ala 220	Asp	Tyr	Ala	Thr
Ala 225	Lys	Ala	Pro	Gly	Ser 230	Pro	Ala	Ala	Pro	Arg 235	Ile	Ser	Pro	Gly	Asp 240
Gln	Arg	Leu	Ala	Gln 245	Ser	Ala	Glu	Met	Tyr 250	His	Tyr	Gln	His	Gln 255	Arg
Gln	Gln	Met	Leu 260	Суз	Leu	Glu	Arg	His 265	Lys	Glu	Pro	Pro	Lys 270	Glu	Leu
Asp	Thr	Ala 275	Ser	Ser	Asp	Glu	Glu 280	Asn	Glu	Asp	Gly	Asp 285	Phe	Thr	Val
Tyr	Glu 290	Cys	Pro	Gly	Leu	Ala 295	Pro	Thr	Gly	Glu	Met 300	Glu	Val	Arg	Asn
Pro 305	Leu	Phe	Asp	His	Ala 310	Ala	Leu	Ser	Ala	Pro 315	Leu	Pro	Ala	Pro	Ser 320
Ser	Pro	Pro	Ala	Leu 325	Pro										

<210> 1350 <211> 62

1397

<212> PRT

<213> Homo sapiens

<400> 1350

Val Lys Ser Asp Thr Pro Pro Cys Val Ser Lys Asn Leu Val Pro Pro 1 5 10 15

Leu His Thr Ser Leu Thr Leu Asn Ile Phe His Trp Ile Leu Asp Arg
20 25 30

Ala Lys Gly Arg Thr Gly Ala Ser Gly Gly Pro Trp Leu Phe Lys Ser 35 40 45

Trp Ile Ile Cys Asp Ser Asn His Lys Phe Leu Ala Asn Phe 50 60

<210> 1351

<211> 312

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (299)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1351

Glu Pro Arg Pro Gly Cys Gly Asn Lys Met Ala Gly Lys Lys Asn Val 1 5 10 15

Leu Ser Ser Leu Ala Val Tyr Ala Glu Asp Ser Glu Pro Glu Ser Asp
20 25 30

Gly Glu Ala Gly Ile Glu Ala Val Gly Ser Ala Ala Glu Glu Lys Gly $35 \hspace{1cm} 40 \hspace{1cm} 45$

Gly Leu Val Ser Asp Ala Tyr Gly Glu Asp Asp Phe Ser Arg Leu Gly
50 55 60

Gly Asp Glu Asp Gly Tyr Glu Glu Glu Glu Asp Glu Asn Ser Arg Gln 65 70 75 80

Ser Glu Asp Asp Ser Glu Thr Glu Lys Pro Glu Ala Asp Asp Pro 85 90 95

Lys Asp Asn Thr Glu Ala Glu Lys Arg Asp Pro Gln Glu Leu Val Ala 100 105 110

Ser Phe Ser Glu Arg Val Arg Asn Met Ser Pro Asp Glu Ile Lys Ile

120 115 125 Pro Pro Glu Pro Pro Gly Arg Cys Ser Asn His Leu Gln Asp Lys Ile 135 Gln Lys Leu Tyr Glu Arg Lys Ile Lys Glu Gly Met Asp Met Asn Tyr 150 Ile Ile Gln Arg Lys Lys Glu Phe Arg Asn Pro Ser Ile Tyr Glu Lys 165 170 Leu Ile Gln Phe Cys Ala Ile Asp Glu Leu Gly Thr Asn Tyr Pro Lys 180 185 Asp Met Phe Asp Pro His Gly Trp Ser Glu Asp Ser Tyr Tyr Glu Ala 200 Leu Ala Lys Ala Gln Lys Ile Glu Met Asp Lys Leu Glu Lys Ala Lys Lys Glu Arg Thr Lys Ile Glu Phe Val Thr Gly Thr Lys Lys Gly Thr 225 230 Thr Thr Asn Ala Thr Ser Thr Thr Thr Thr Thr Ala Ser Thr Ala Val 245 250 Ala Asp Ala Gln Lys Arg Lys Ser Lys Trp Asp Ser Ala Ile Pro Val 260 265 Thr Thr Ile Ser Pro Ala His His Pro His His His Ser His Pro Ala 280 Ser Cys Cys His Gly His His Gln Arg Gln Xaa Ser Lys Asp His Arg His Leu Cys Cys Gly Ala Pro Leu 305 310

<210> 1352

<211> 259

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1352

Phe Gly Gln

Leu 1	Leu	Asp	Ser	Leu 5	Lys	Xaa	Asp	Tyr	Ala 10	Gly	Lys	Pro	Gln	Pro 15	Pro
Ile	Lys	Ser	Glu 20	Arg	Arg	Asn	Pro	Pro 25	Ser	Tyr	Ala	Met	Ala 30	Gly	Lys
Lys	Val	Leu 35	Ile	Val	Tyr	Ala	His 40	Gln	Glu	Pro	Lys	Ser 45	Phe	Asn	Gly
Ser	Leu 50	Lys	Asn	Val	Ala	Val 55	Asp	Glu	Leu	Ser	Arg 60	Gln	Gly	Cys	Thr
Val 65	Thr	Val	Ser	Asp	Leu 70	Tyr	Ala	Met	Asn	Phe 75	Glu	Pro	Arg	Ala	Thr 80
Asp	Lys	Asp	Ile	Thr 85	Gly	Thr	Leu	Ser	Asn 90	Pro	Glu	Val	Phe	Asn 95	Tyr
Gly	Val	Glu	Thr 100	His	Glu	Ala	Tyr	Lys 105	Gln	Arg	Ser	Leu	Ala 110	Ser	Asp
Ile	Thr	Asp 115	Glu	Gln	Lys	Lys	Val 120	Arg	Glu	Ala	Asp	Leu 125	Val	Ile	Phe
Gln	Phe 130	Pro	Leu	Tyr	Trp	Phe 135	Ser	Val	Pro	Ala	Ile 140	Leu	Lys	Gly	Trp
Met 145	Asp	Arg	Val	Leu	Cys 150	Gln	Gly	Phe	Ala	Phe 155	Asp	Ile	Pro	Gly	Phe 160
Tyr	Asp	Ser	Gly	Leu 165	Leu	Gln	Gly	Lys	Leu 170	Ala	Leu	Leu	Ser	Val 175	Thr
Thr	Gly	Gly	Thr 180	Ala	Glu	Met	Tyr	Thr 185	Lys	Thr	Gly	Val	Asn 190	Gly	Asp
Ser	Arg	Туг 195	Phe	Leu	Trp	Pro	Leu 200	Gln	His	Gly	Thr	Leu 205	His	Phe	Cys
Gly	Phe 210	Lys	Val	Leu	Ala	Pro 215	Gln	Ile	Ser	Phe	Ala 220	Pro	Glu	Ile	Ala
Ser 225	Glu	Glu	Glu	Arg	Lys 230	Gly	Met	Val	Ala	Ala 235	Trp	Ser	Gln	Arg	Leu 240
Gln	Thr	Ile	Trp	Lys 245	Glu	Glu	Pro	Ile	Pro 250	Cys	Thr	Ala	His	Trp 255	His

<210> 1353_.<211> 72

<212> PRT

<213> Homo sapiens

<400> 1353

Asp Leu Ala Ser Glu Glu His Phe Phe Ser Val Lys Phe Leu Tyr Leu 1 5 10 15

Lys Ile Gln Lys Tyr Phe Arg Ile Leu Leu Ile Leu Ser Pro Val Phe 20 25 30

Thr Ser Phe Trp Lys Thr Cys Ile Thr Met Ser Leu Glu Lys Gly Gln 35 40 45

Arg Lys Ala Phe His Val Lys Ile Arg Ser Leu Ala Ile Ser Asn Pro 50 55 60

Val Leu Phe Ser Leu His Phe Phe 65 70

<210> 1354

<211> 301

<212> PRT

<213> Homo sapiens

<400> 1354

Lys Arg Arg Arg Leu Glu Gln Arg Gln Gln Pro Asp Glu Gln Arg
1 5 10 15

Arg Arg Ser Gly Ala Met Val Lys Met Ala Ala Ala Gly Gly Gly 20 25 30

Gly Gly Gly Arg Tyr Gly Gly Gly Ser Glu Gly Gly Arg Ala Pro 35 40 45

Lys Arg Leu Lys Thr Asp Asn Ala Gly Asp Gln His Gly Gly Gly Gly 55 60

Gly Gly Gly Gly Ala Gly Ala Ala Gly Gly Gly Gly Gly Glu 65 70 75 80

Asn Tyr Asp Asp Pro His Lys Thr Pro Ala Ser Pro Val Val His Ile 85 90 95

Arg Gly Leu Ile Asp Gly Val Val Glu Ala Asp Leu Val Glu Ala Leu 100 105 110